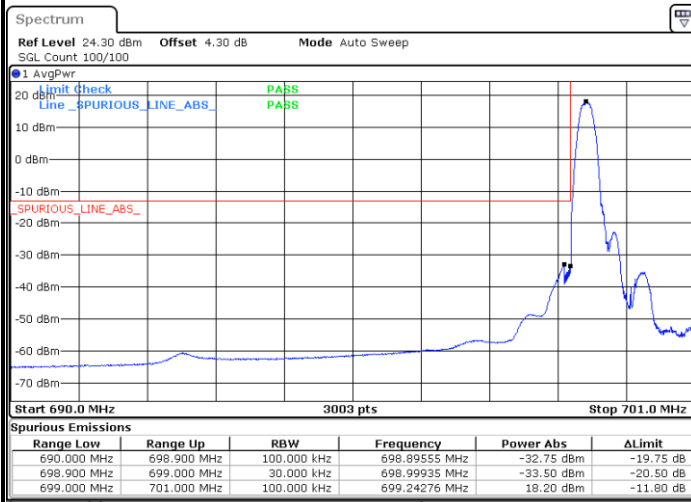




LTE Band 12 / 1.4MHz / 64QAM

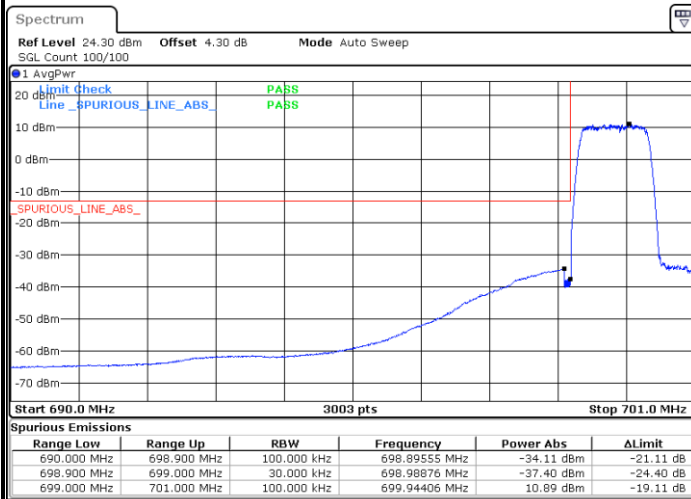
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



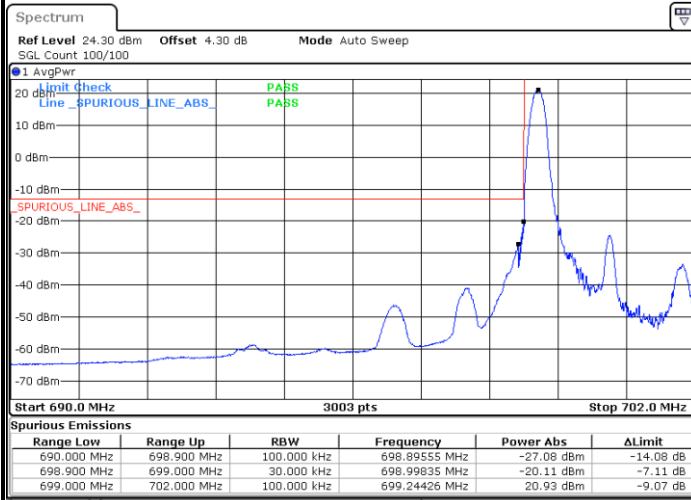
Highest Band Edge / Full RB



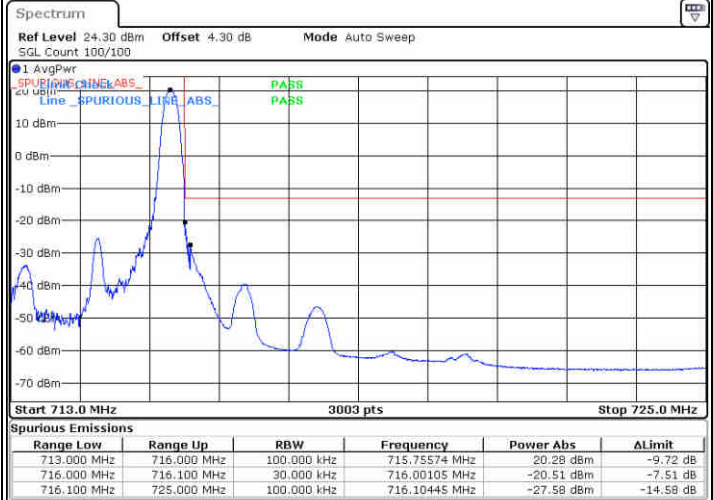


LTE Band 12 / 3MHz / QPSK

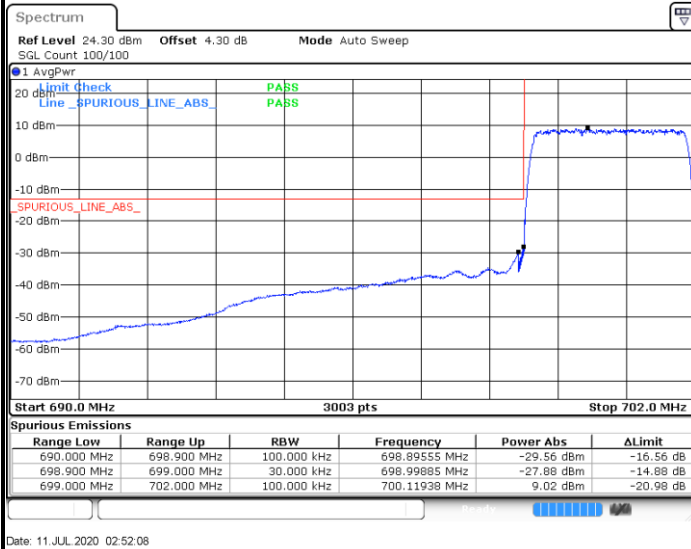
Lowest Band Edge / 1RB



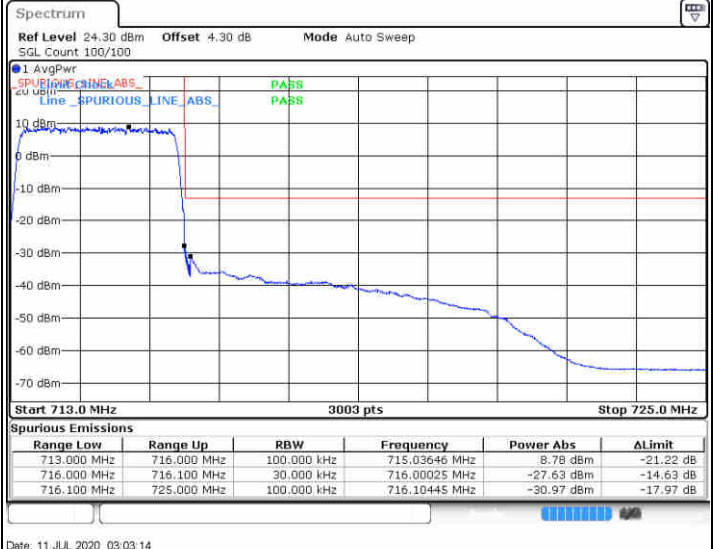
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



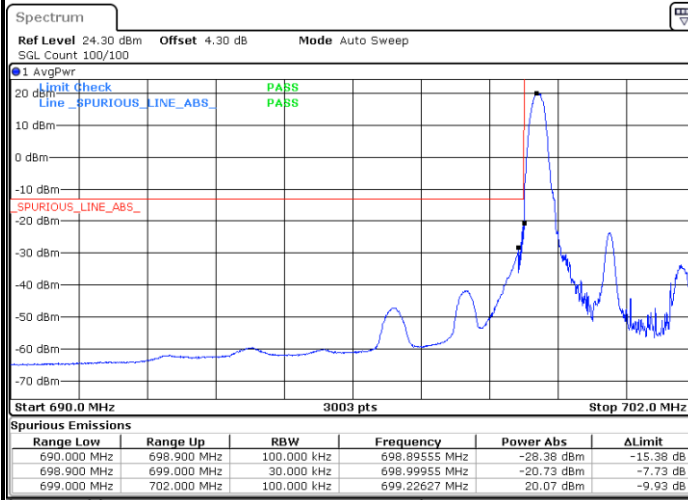
Highest Band Edge / Full RB



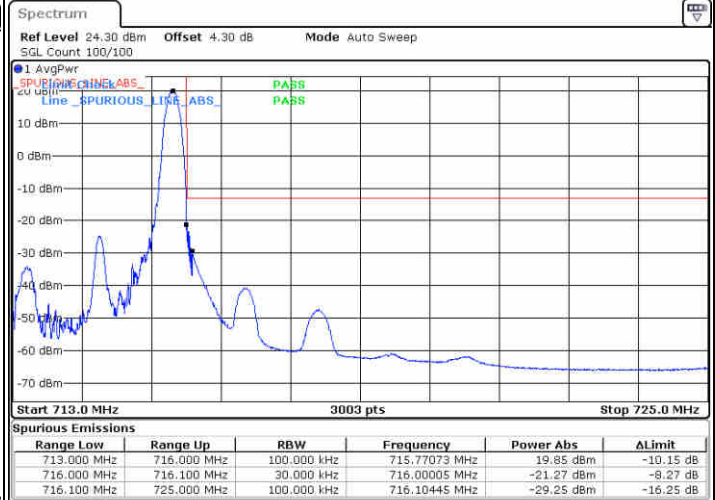


LTE Band 12 / 3MHz / 16QAM

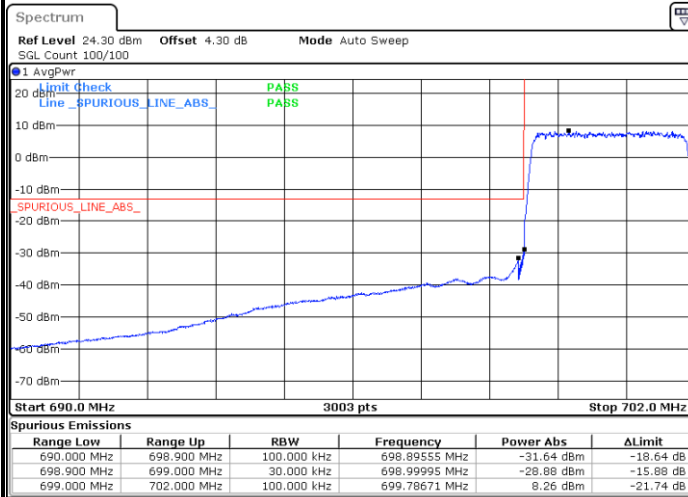
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



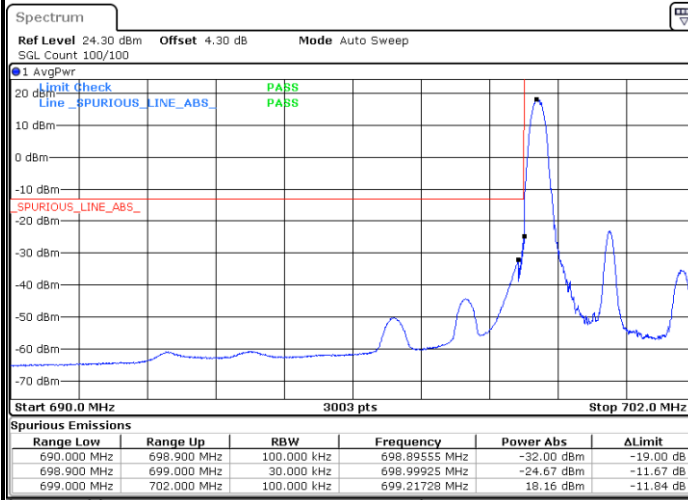
Highest Band Edge / Full RB



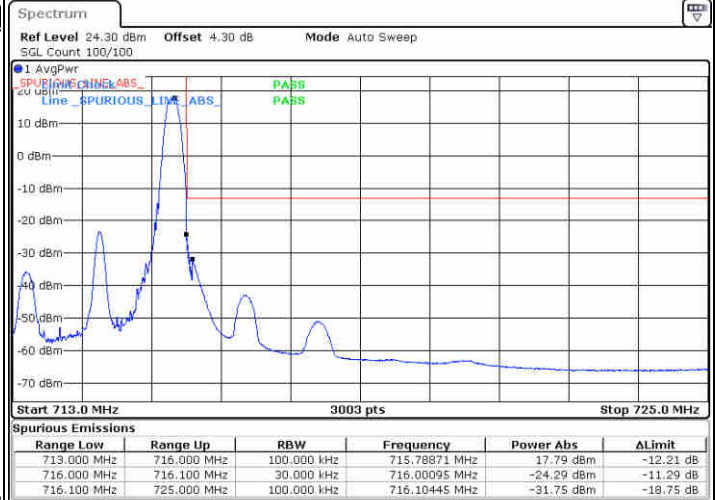


LTE Band 12 / 3MHz / 64QAM

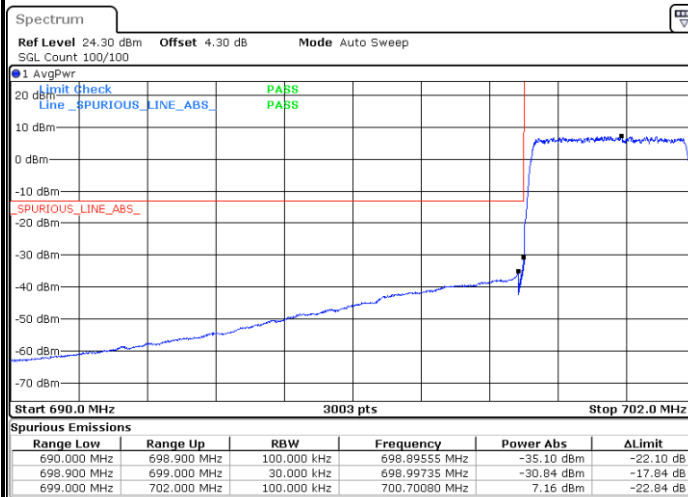
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



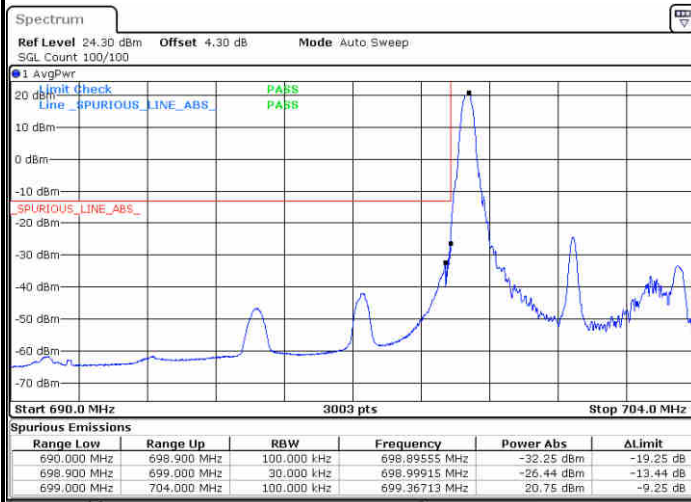
Highest Band Edge / Full RB



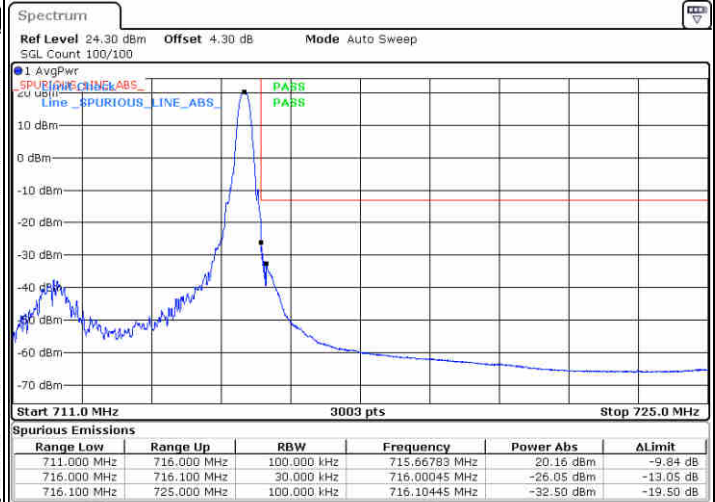


LTE Band 12 / 5MHz / QPSK

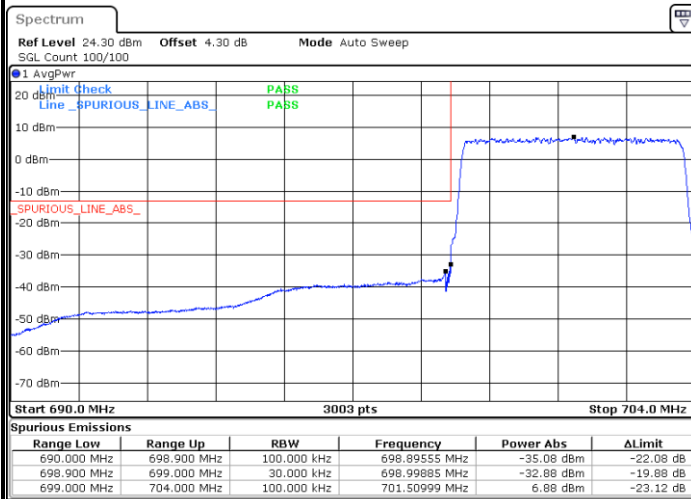
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



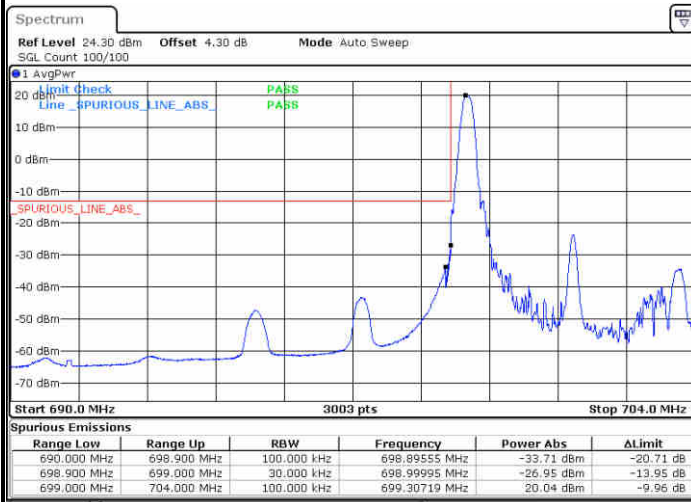
Highest Band Edge / Full RB



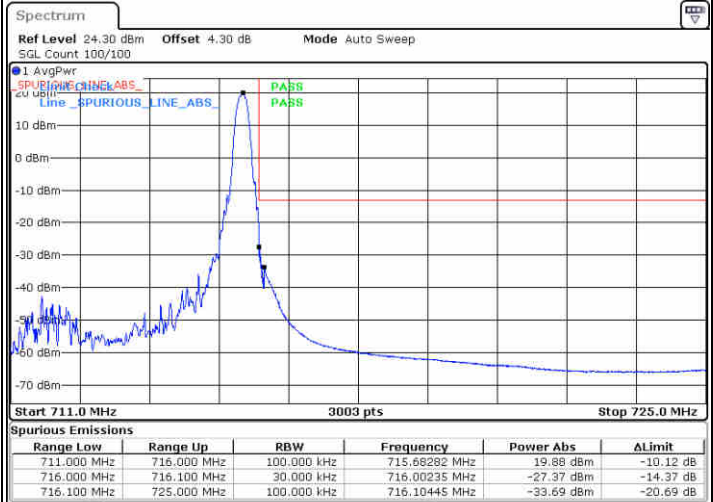


LTE Band 12 / 5MHz / 16QAM

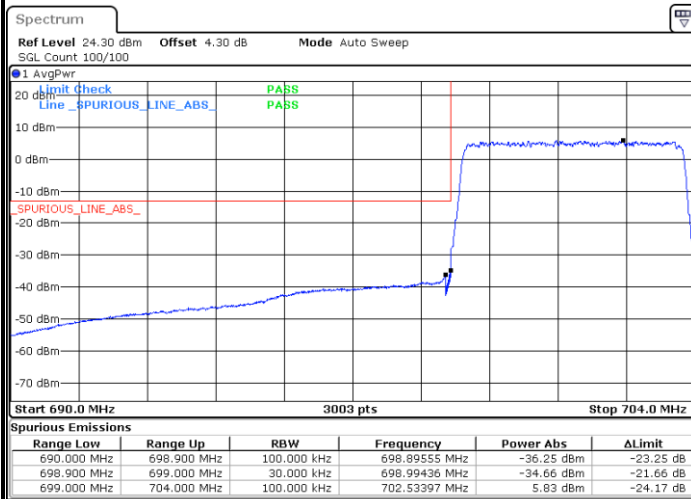
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



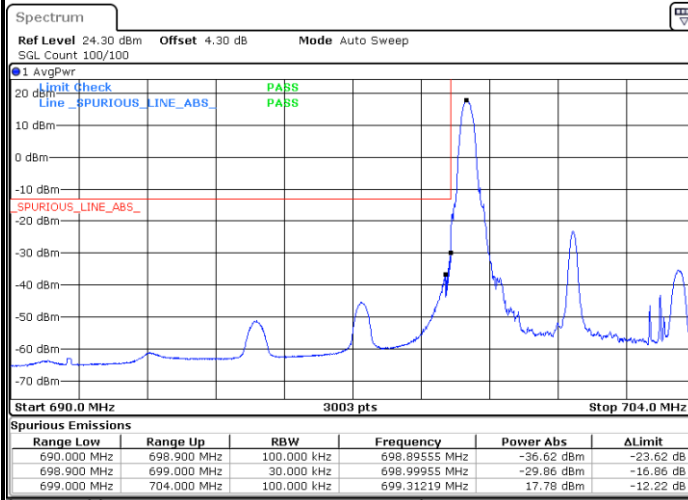
Highest Band Edge / Full RB



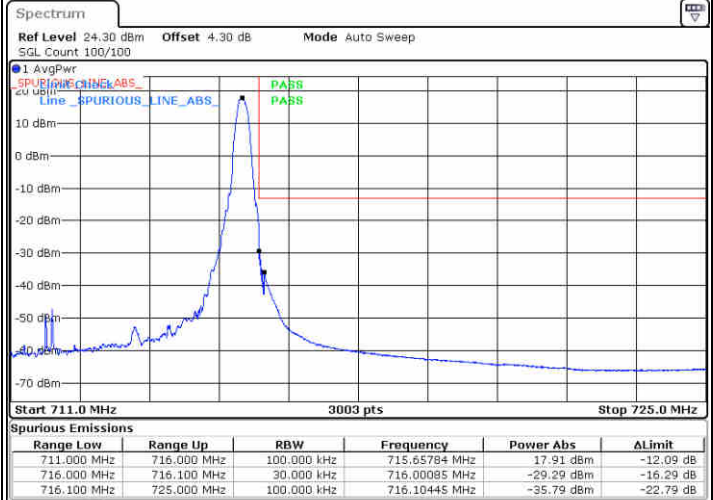


LTE Band 12 / 5MHz / 64QAM

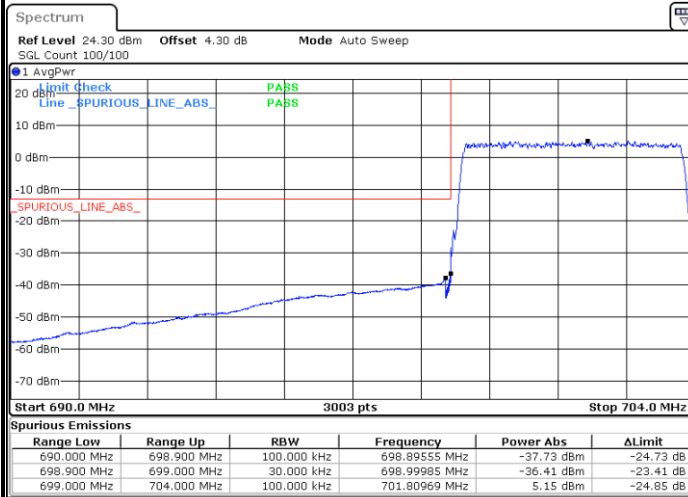
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



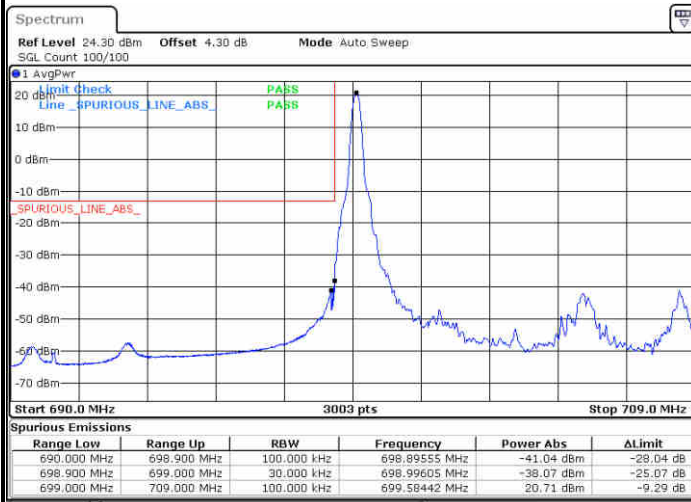
Highest Band Edge / Full RB



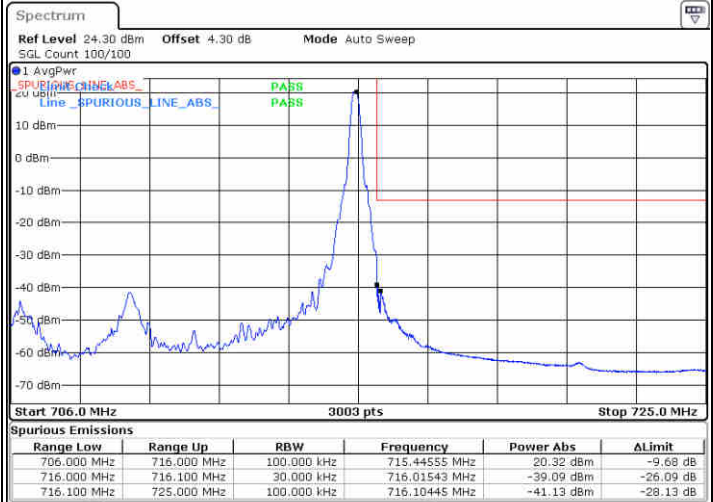


LTE Band 12 / 10MHz / QPSK

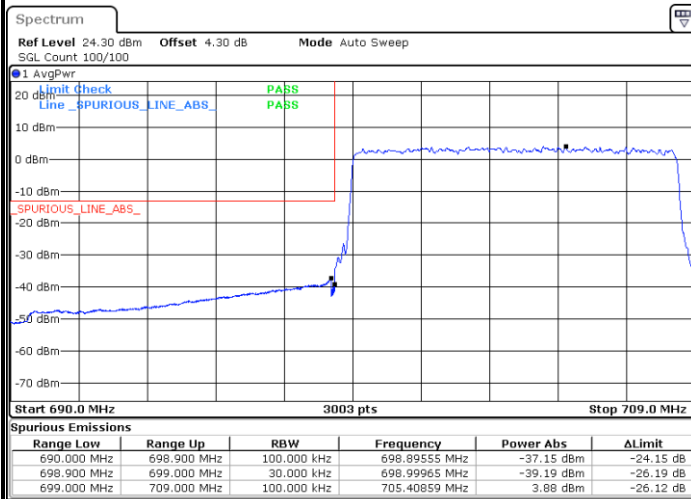
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



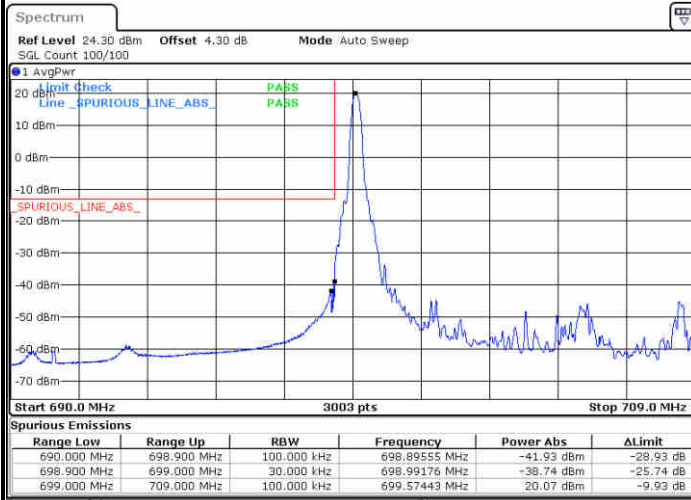
Highest Band Edge / Full RB



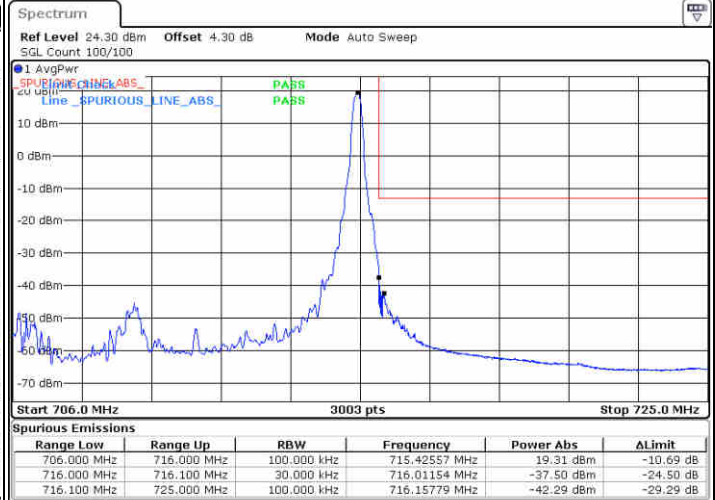


LTE Band 12 / 10MHz / 16QAM

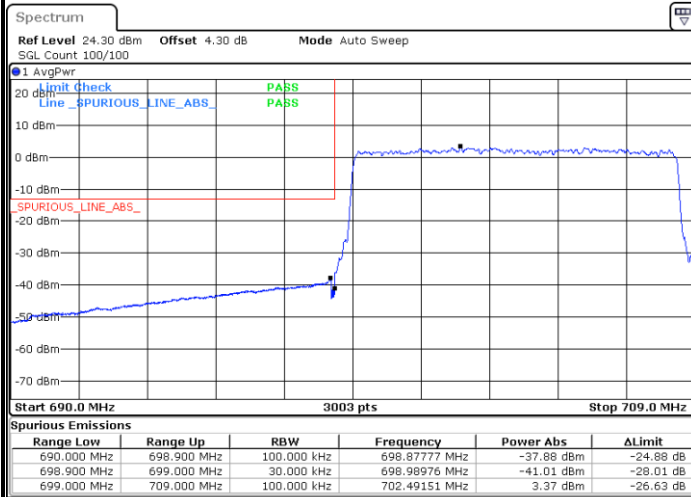
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



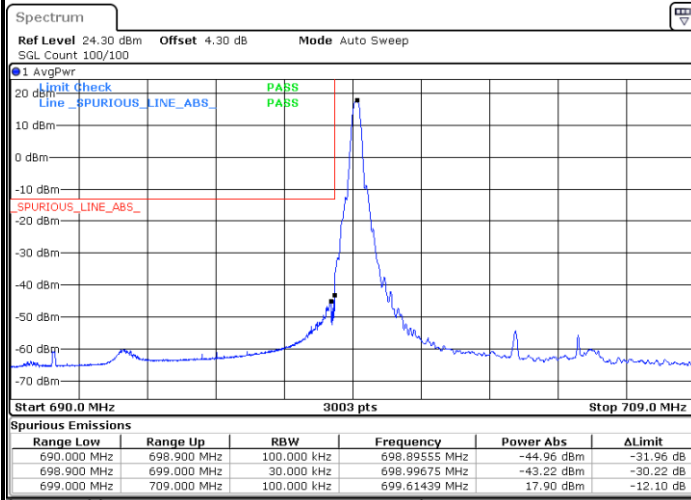
Highest Band Edge / Full RB



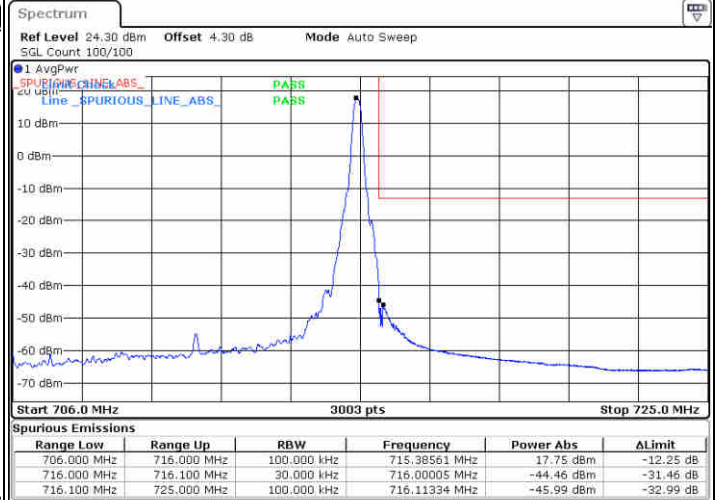


LTE Band 12 / 10MHz / 64QAM

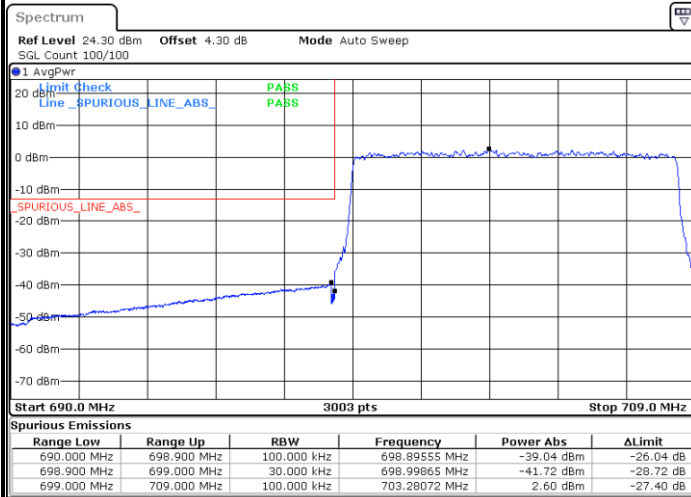
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

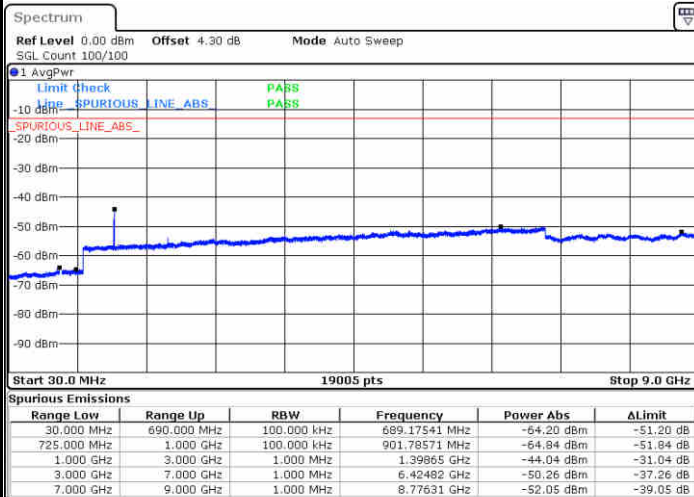




Conducted Spurious Emission

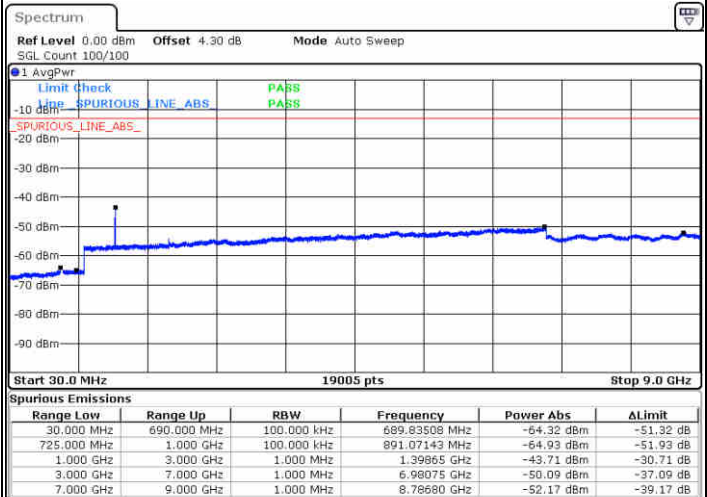
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



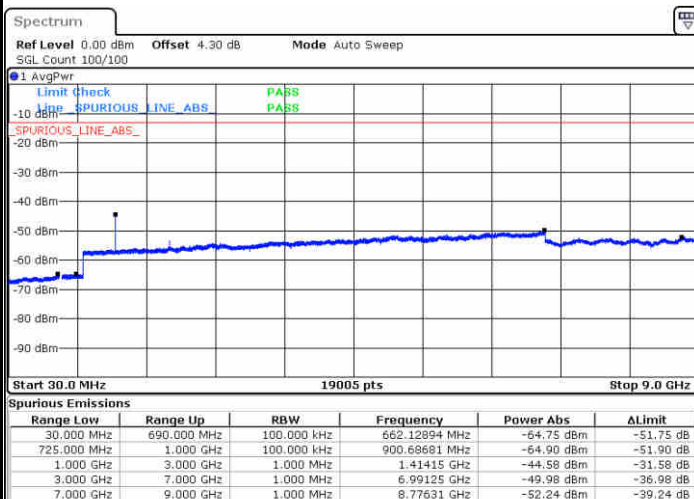
Date: 11 JUL 2020 02:15:01

Lowest Channel / 16QAM



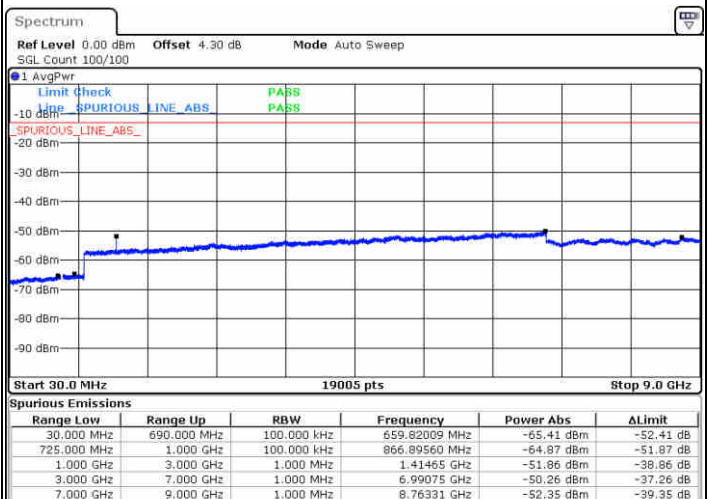
Date: 11 JUL 2020 02:13:55

Middle Channel / QPSK



Date: 11 JUL 2020 02:16:22

Middle Channel / 16QAM

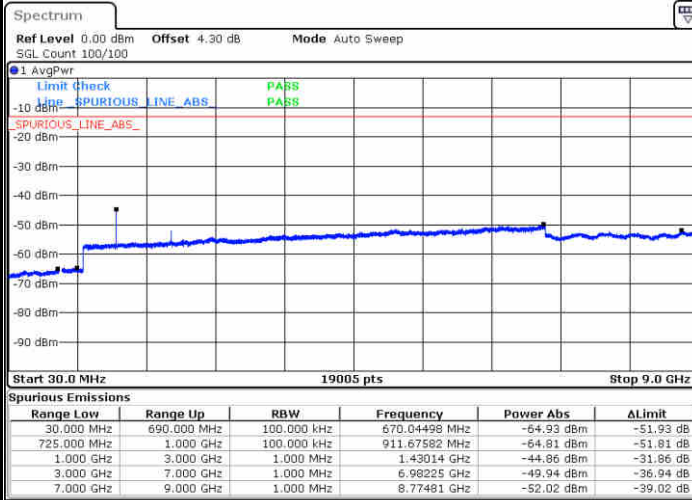


Date: 11 JUL 2020 02:16:56



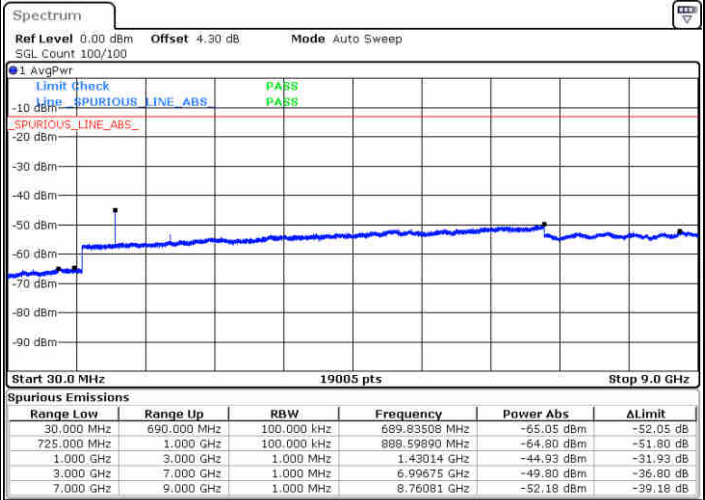
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 11 JUL 2020 02:26:08

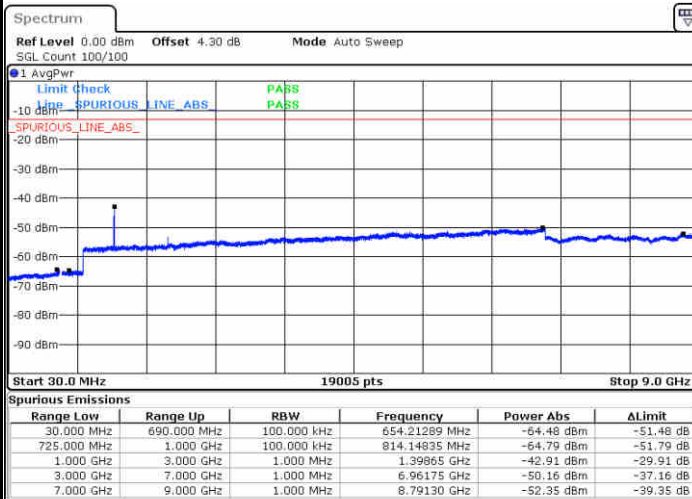
Highest Channel / 16QAM



Date: 11 JUL 2020 02:26:40

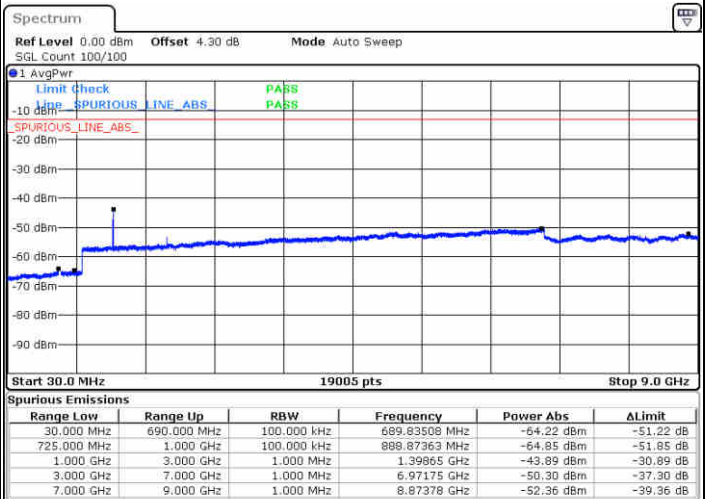
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 11 JUL 2020 02:57:49

Lowest Channel / 16QAM

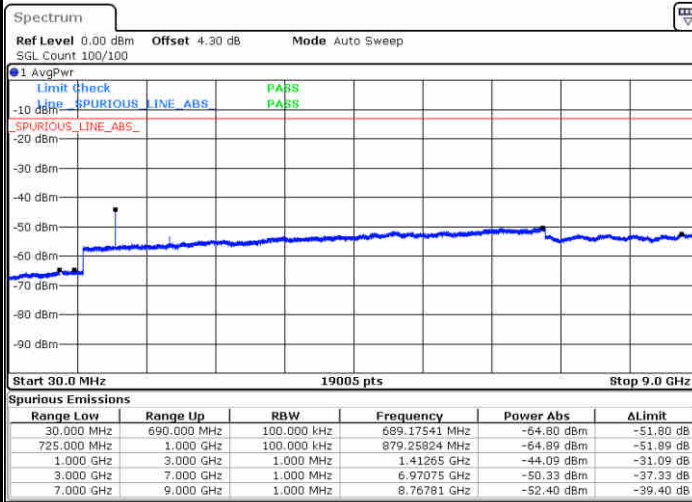


Date: 11 JUL 2020 02:58:25



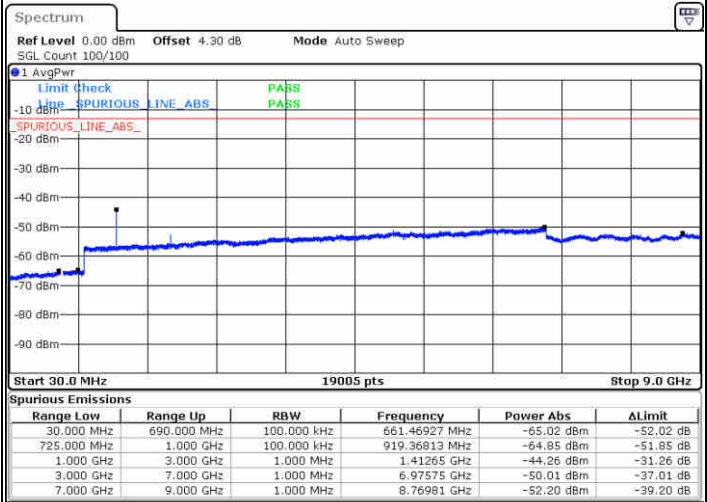
LTE Band 12 / 3MHz

Middle Channel / QPSK



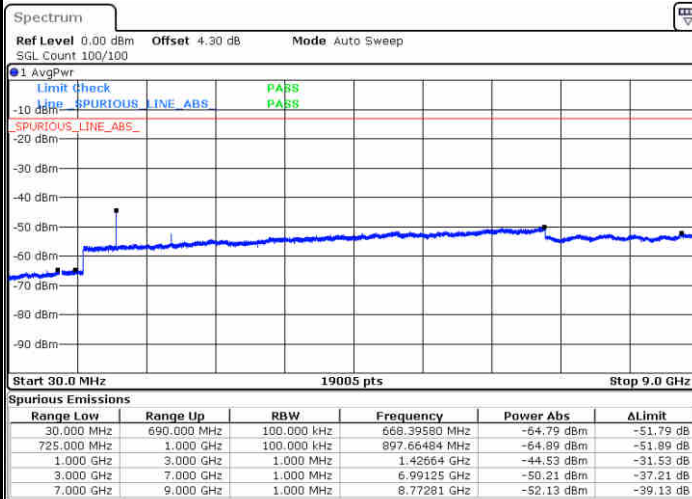
Date: 11 JUL 2020 02:58:57

Middle Channel / 16QAM



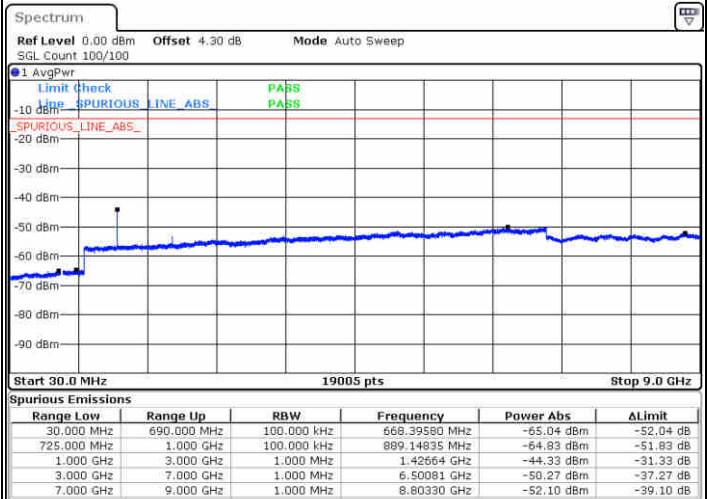
Date: 11 JUL 2020 02:59:31

Highest Channel / QPSK



Date: 11 JUL 2020 03:07:16

Highest Channel / 16QAM

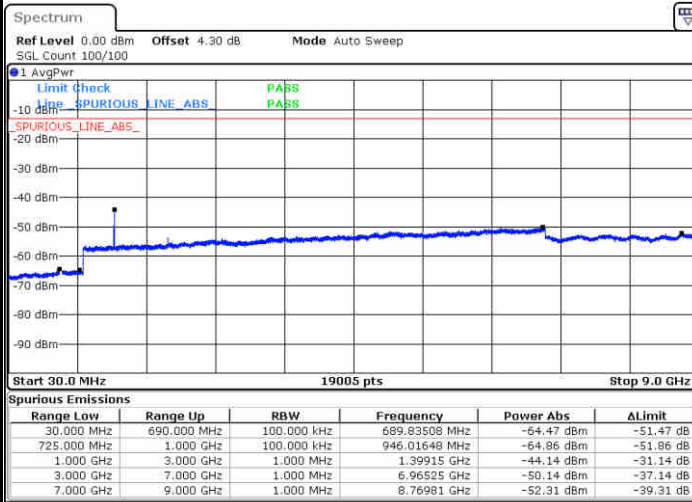


Date: 11 JUL 2020 03:08:43



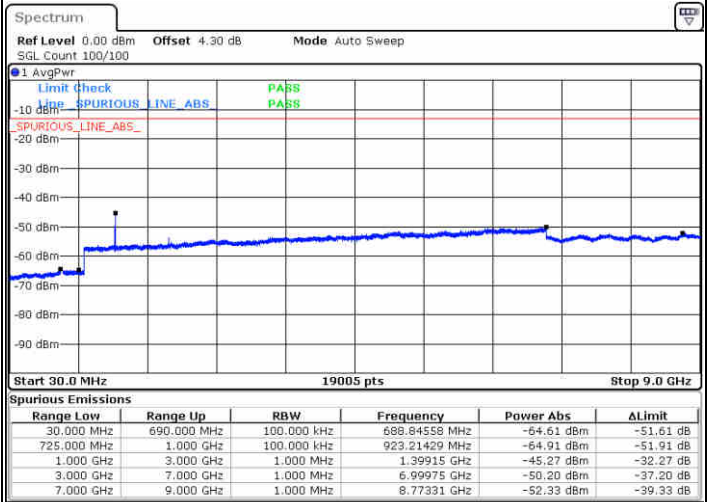
LTE Band 12 / 5MHz

Lowest Channel / QPSK



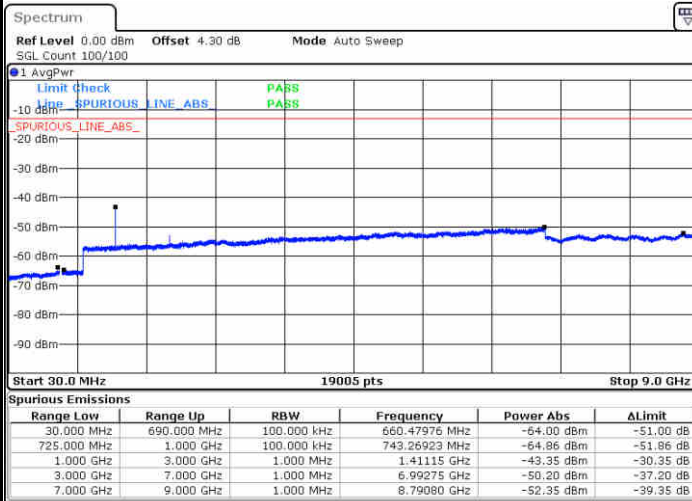
Date: 11 JUL 2020 03:15:10

Lowest Channel / 16QAM



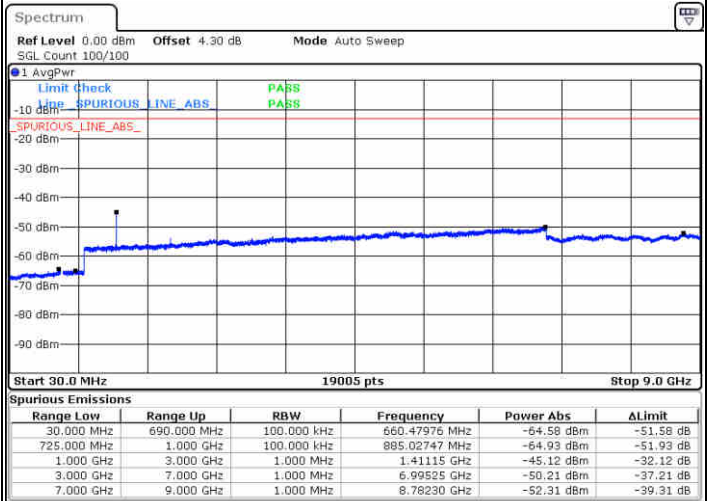
Date: 11 JUL 2020 03:16:15

Middle Channel / QPSK



Date: 11 JUL 2020 03:20:49

Middle Channel / 16QAM

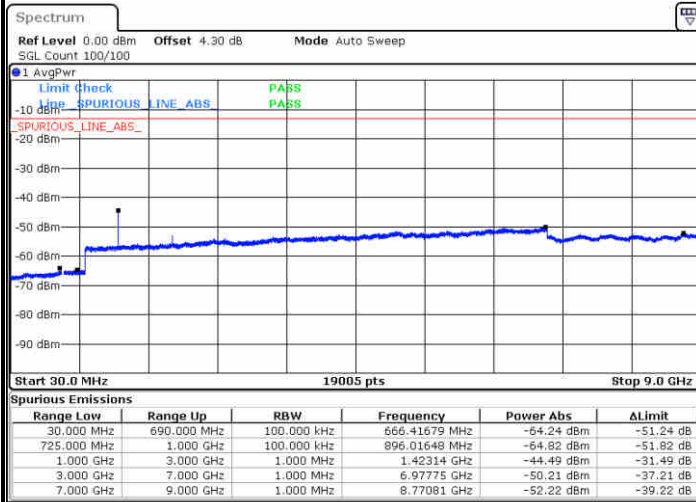


Date: 11 JUL 2020 03:21:40



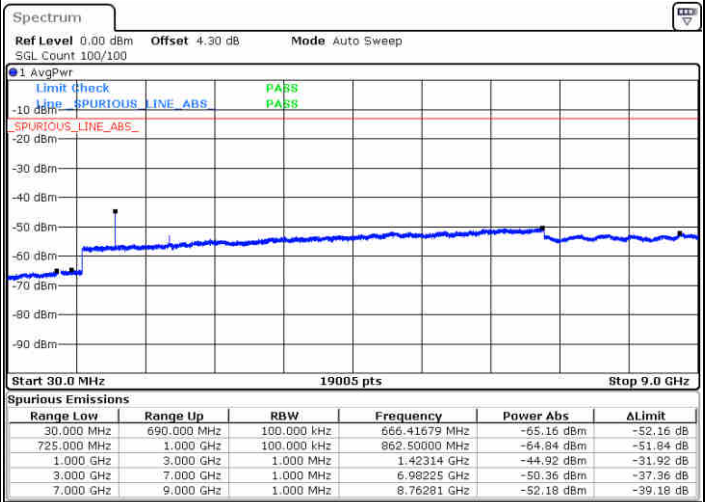
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 11 JUL 2020 03:26:34

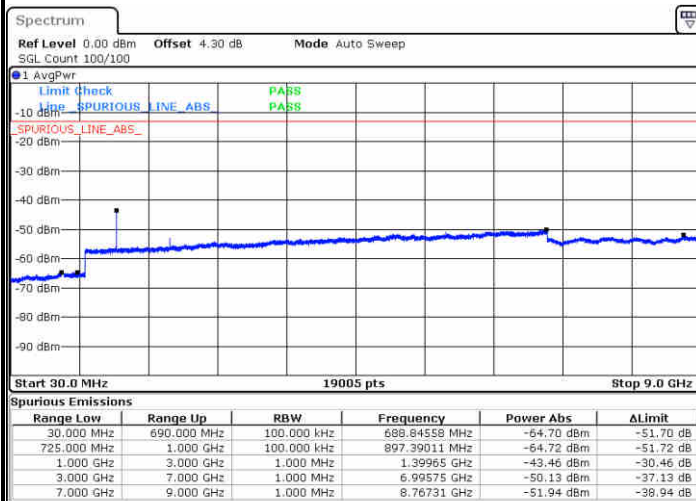
Highest Channel / 16QAM



Date: 11 JUL 2020 03:27:05

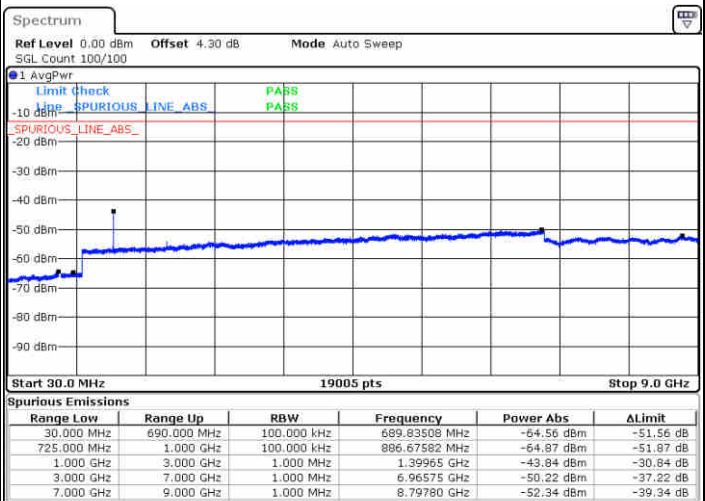
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 11 JUL 2020 03:41:58

Lowest Channel / 16QAM

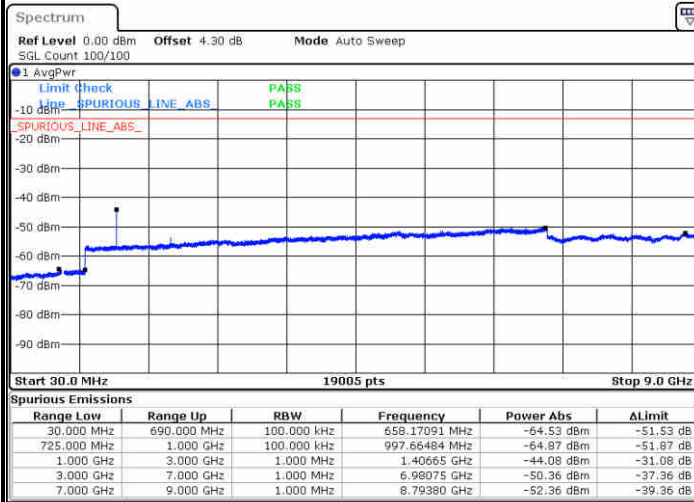


Date: 11 JUL 2020 03:38:36



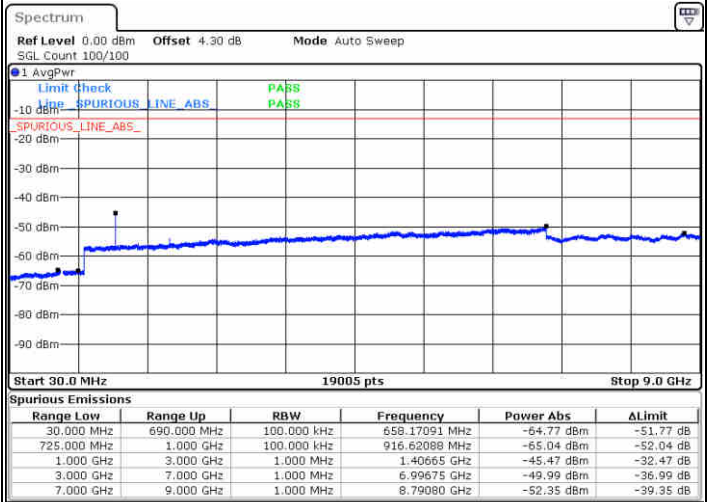
LTE Band 12 / 10MHz

Middle Channel / QPSK



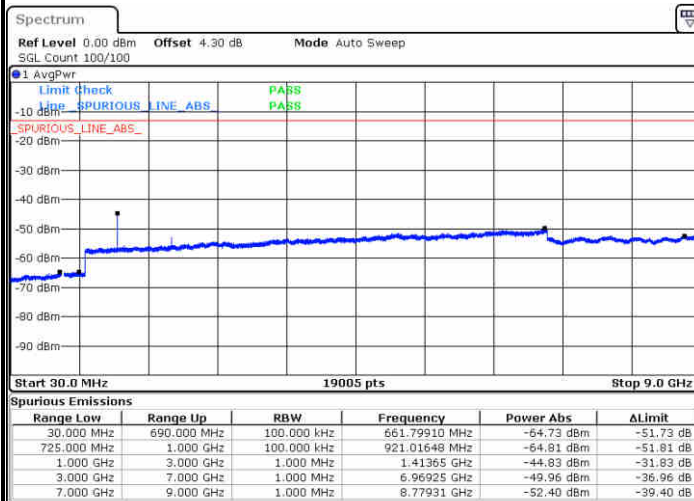
Date: 11 JUL 2020 03:43:15

Middle Channel / 16QAM



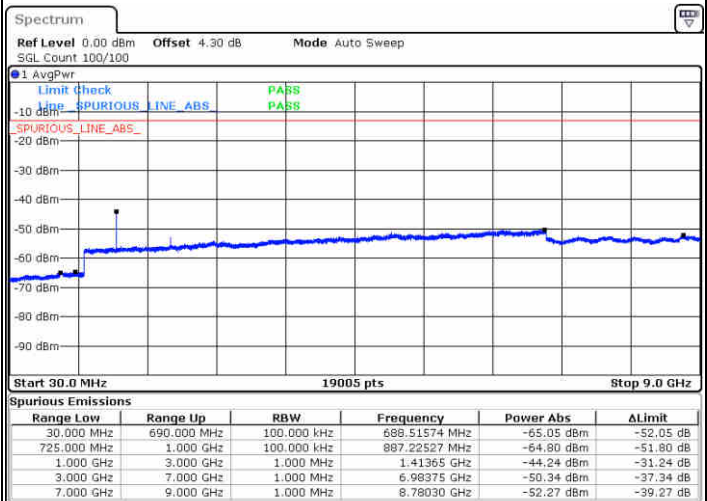
Date: 11 JUL 2020 03:43:54

Highest Channel / QPSK



Date: 11 JUL 2020 03:52:52

Highest Channel / 16QAM

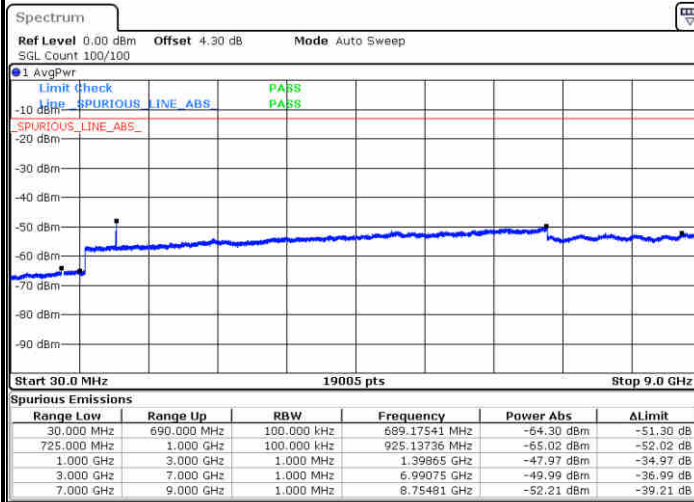


Date: 11 JUL 2020 03:52:20



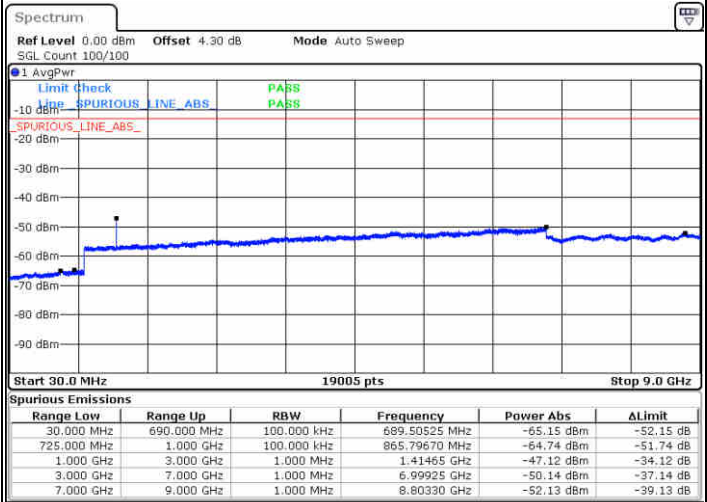
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



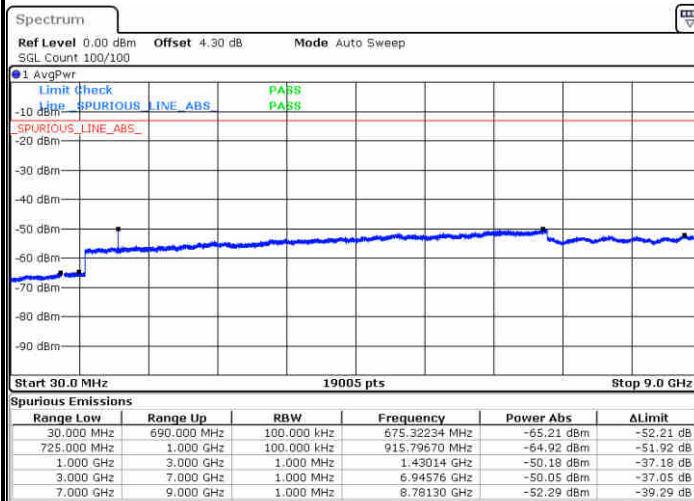
Date: 11 JUL 2020 02:12:44

Middle Channel / 64QAM



Date: 11 JUL 2020 02:17:50

Highest Channel / 64QAM

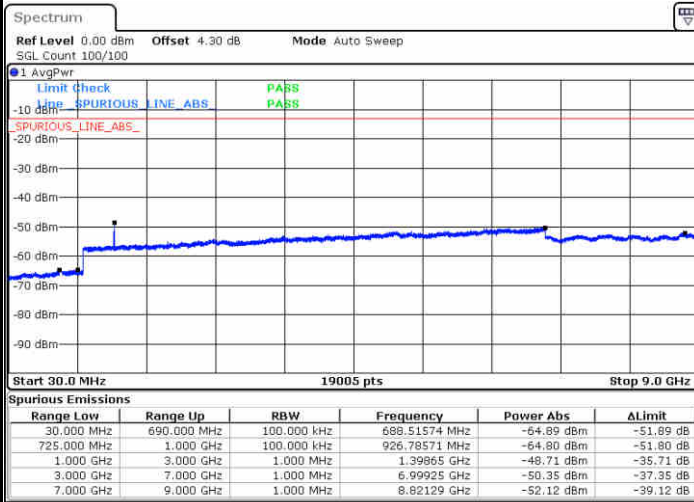


Date: 11 JUL 2020 02:27:28



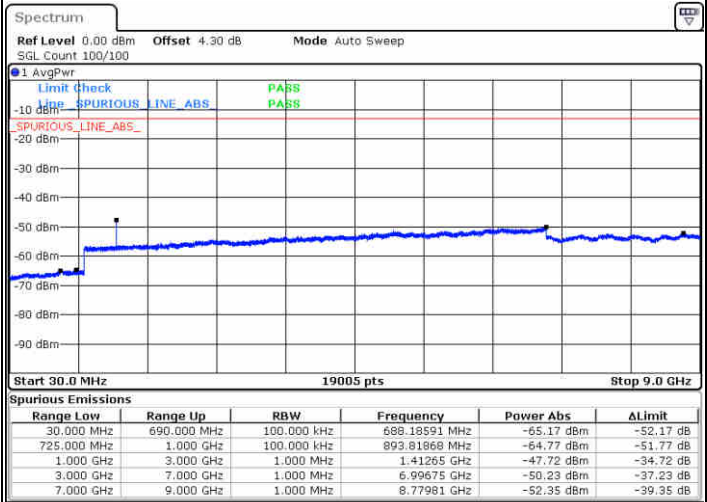
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



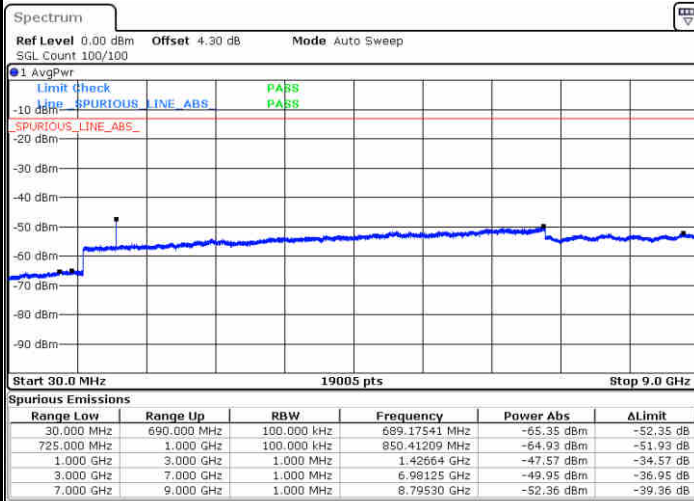
Date: 11 JUL 2020 02:55:24

Middle Channel / 64QAM



Date: 11 JUL 2020 03:00:18

Highest Channel / 64QAM

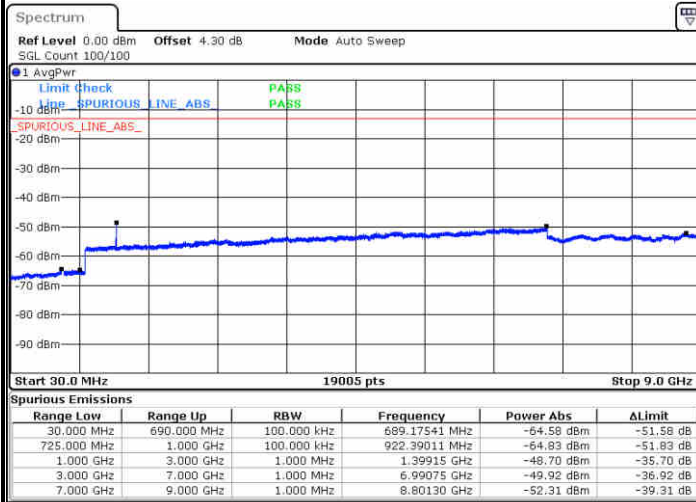


Date: 11 JUL 2020 03:06:00



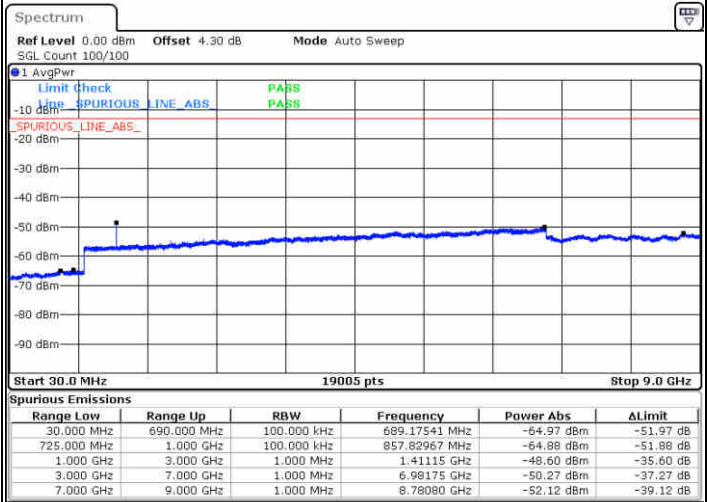
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



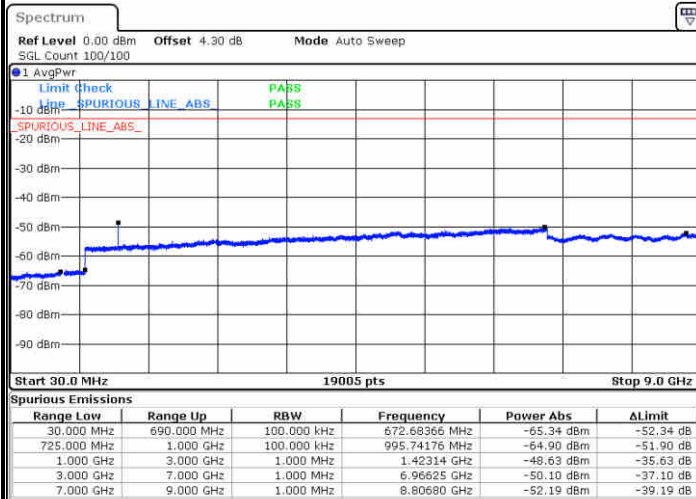
Date: 11 JUL 2020 03:17:41

Middle Channel / 64QAM



Date: 11 JUL 2020 03:22:28

Highest Channel / 64QAM

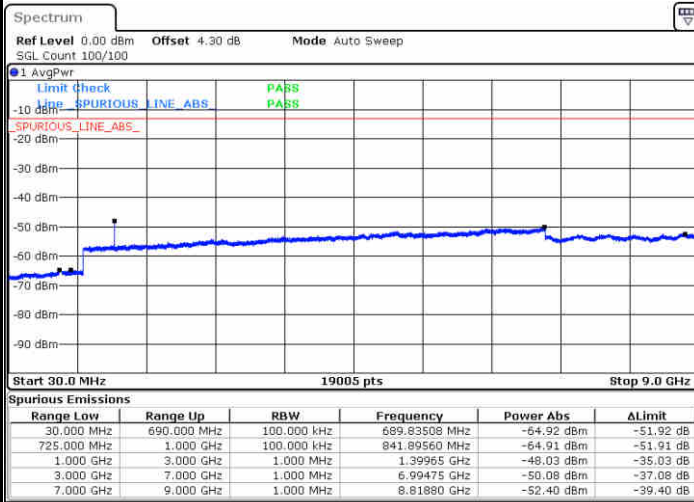


Date: 11 JUL 2020 03:28:06



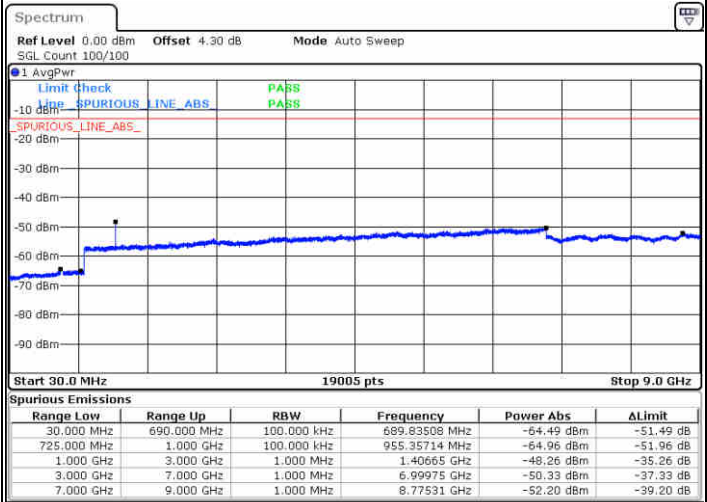
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



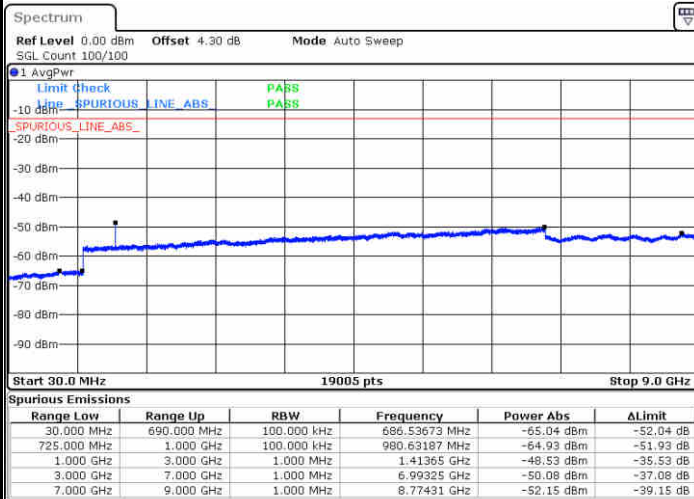
Date: 11 JUL 2020 03:36:20

Middle Channel / 64QAM



Date: 11 JUL 2020 03:44:27

Highest Channel / 64QAM



Date: 11 JUL 2020 03:51:38

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0033	
20	Battery End Point	0.0028	

Note:

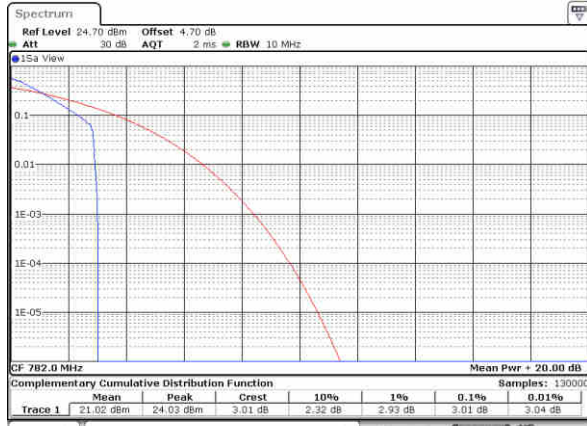
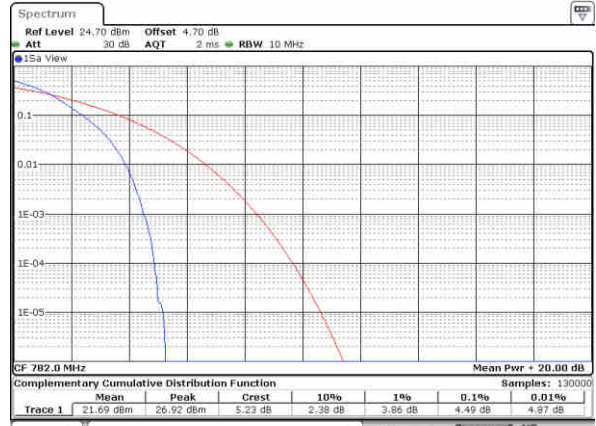
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.01	4.49	4.12	5.48	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.09	5.97	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB

Middle Channel / Full RB

LTE Band 13 / 10MHz / 16QAM
Middle Channel / 1RB

Middle Channel / Full RB

LTE Band 13 / 10MHz / 64QAM
Middle Channel / 1RB

Middle Channel / Full RB


Date: 27-Mar-2020 03:24:53

Date: 27-Mar-2020 03:24:26

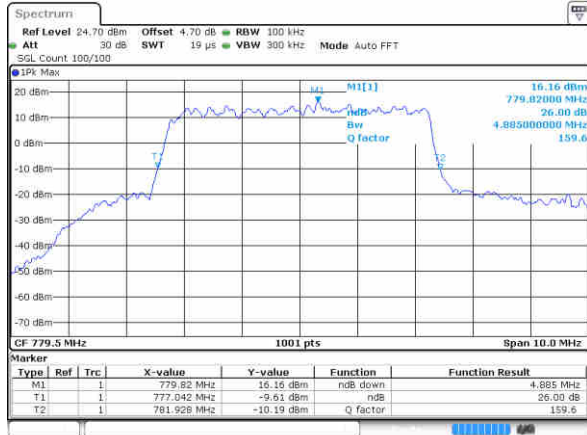
**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.89	4.92	-	-	-	-	-	-
Middle CH	-	-	-	-	4.89	4.85	9.79	9.81	-	-	-	-
Highest CH	-	-	-	-	4.90	4.85	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.86	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.93	-	9.63	-	-	-	-	-
Highest CH	-	-	-	-	4.90	-	-	-	-	-	-	-

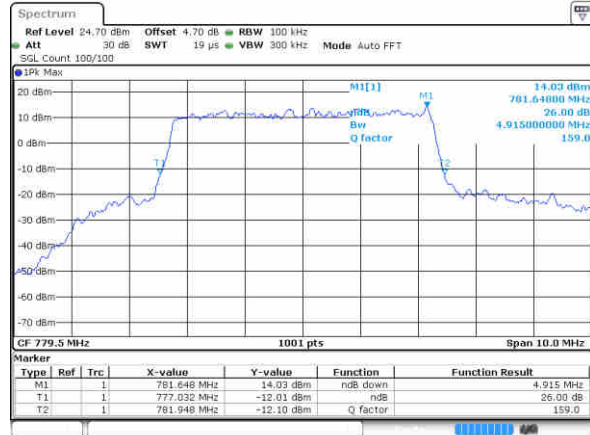


LTE Band 13

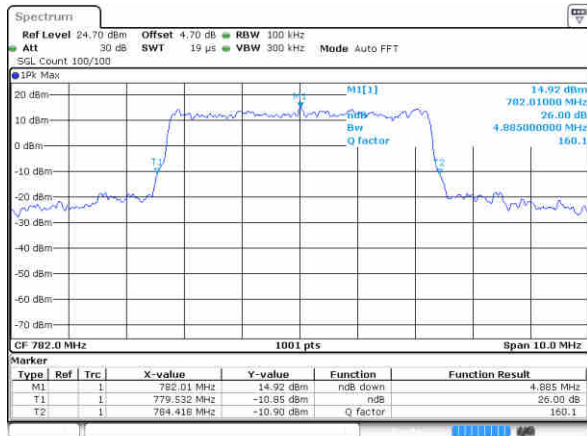
Lowest Channel / 5MHz / QPSK



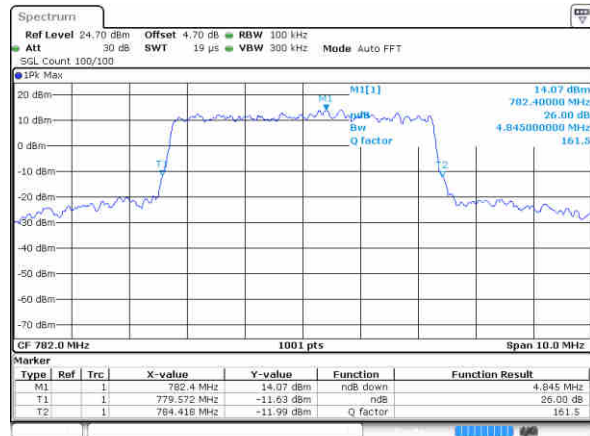
Lowest Channel / 5MHz / 16QAM



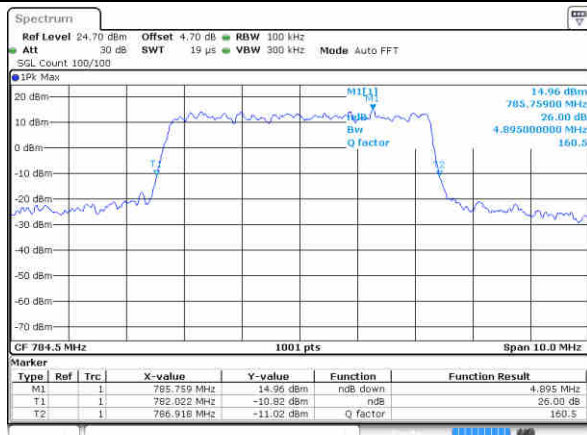
Middle Channel / 5MHz / QPSK



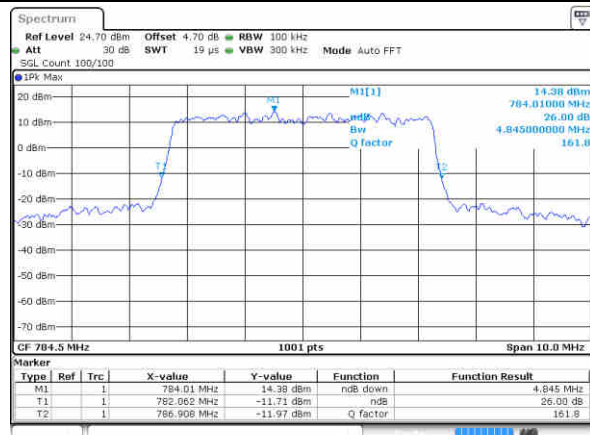
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



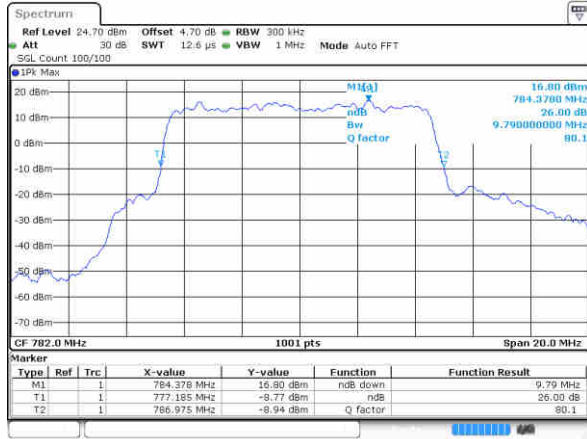
Highest Channel / 5MHz / 16QAM



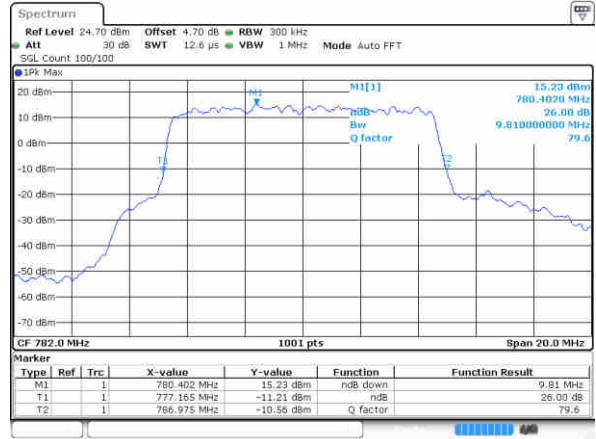


LTE Band 13

Middle Channel / 10MHz / QPSK



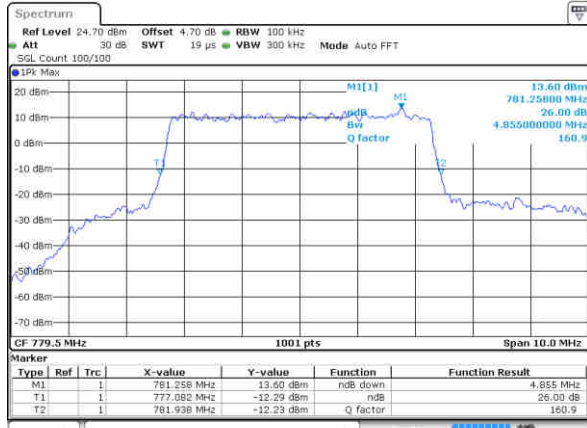
Middle Channel / 10MHz / 16QAM



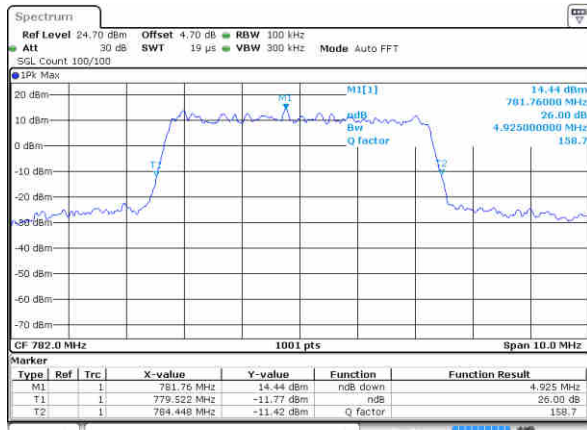


LTE Band 13

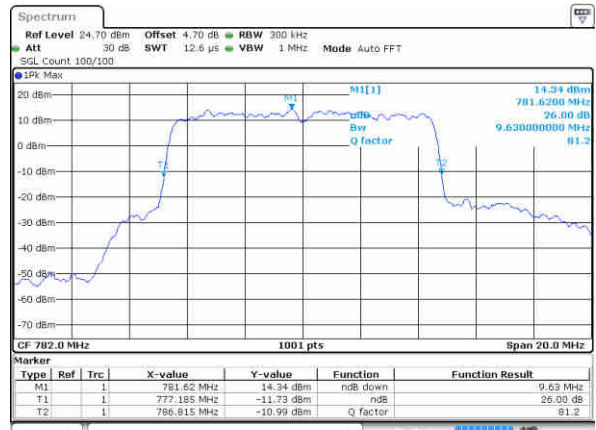
Lowest Channel / 5MHz / 64QAM



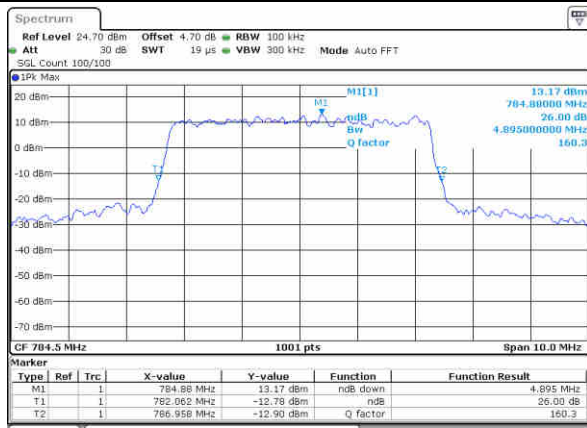
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



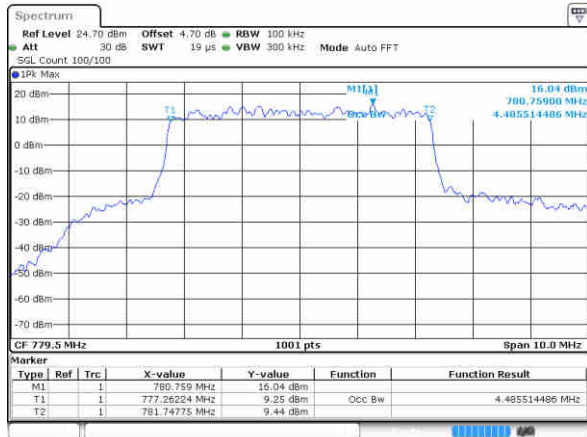
**Occupied Bandwidth**

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.51	8.95	8.99	-	-	-	-
Highest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	-	8.97	-	-	-	-	-
Highest CH	-	-	-	-	4.48	-	-	-	-	-	-	-

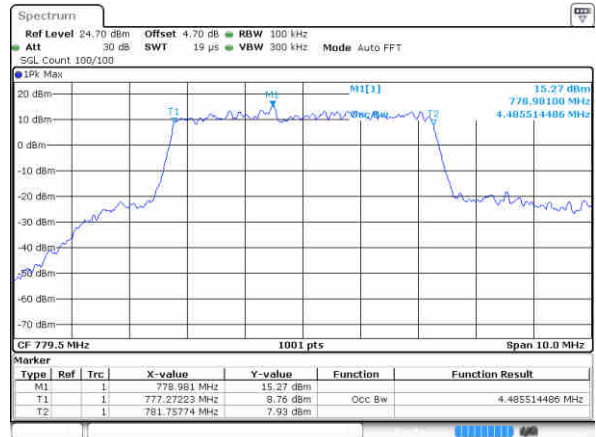


LTE Band 13

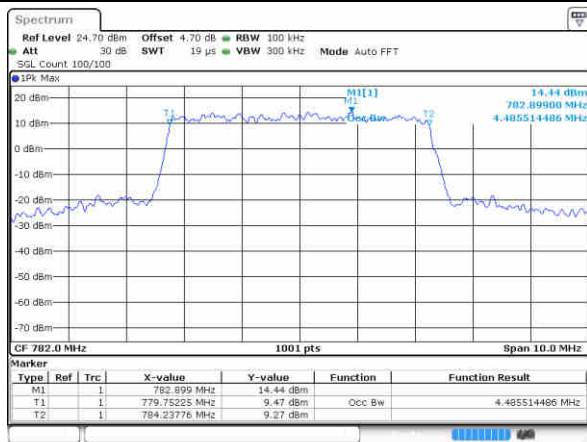
Lowest Channel / 5MHz / QPSK



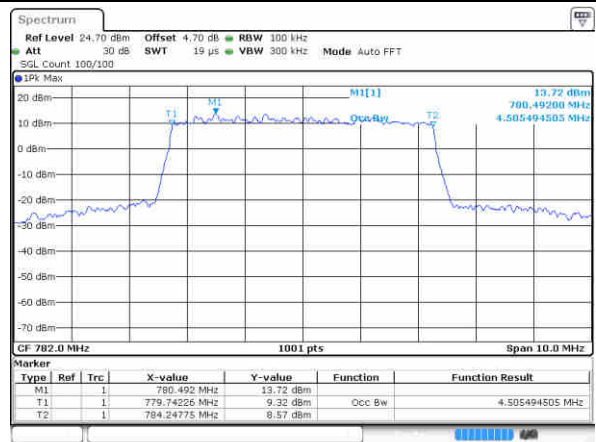
Lowest Channel / 5MHz / 16QAM



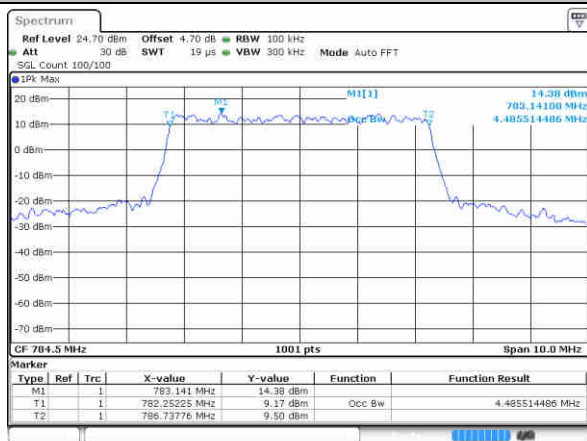
Middle Channel / 5MHz / QPSK



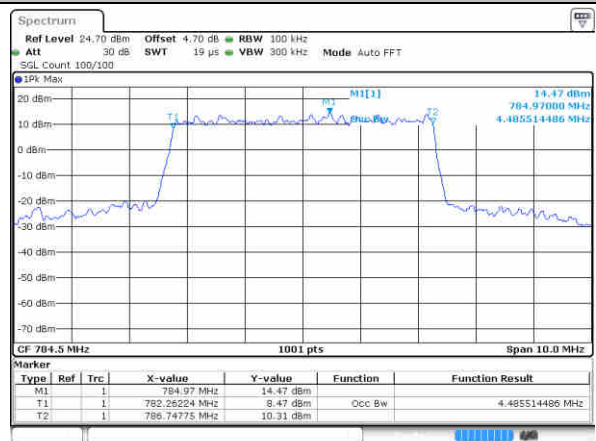
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



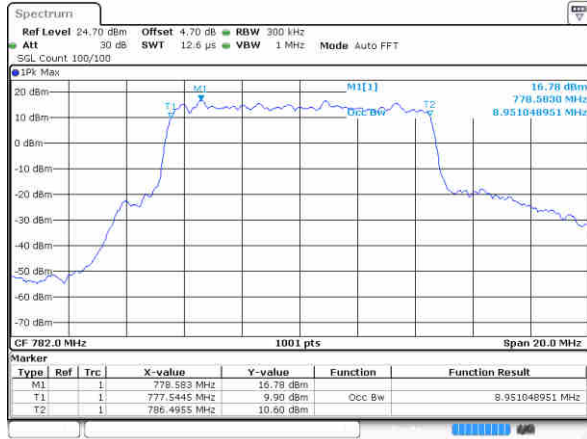
Highest Channel / 5MHz / 16QAM



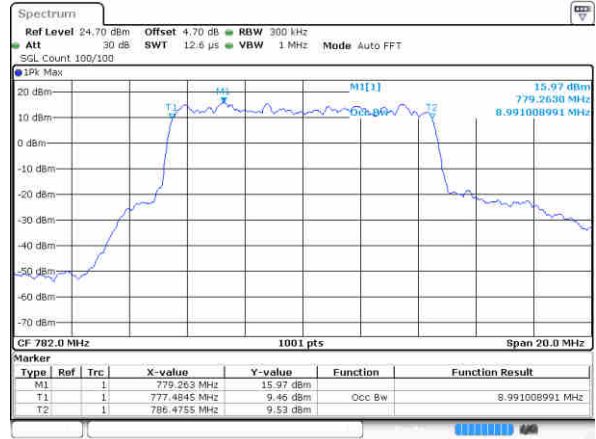


LTE Band 13

Middle Channel / 10MHz / QPSK



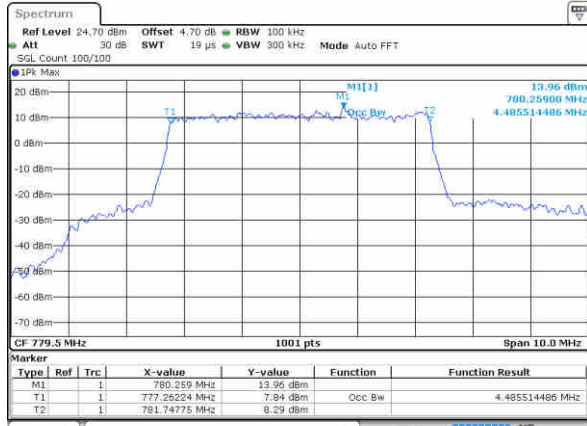
Middle Channel / 10MHz / 16QAM



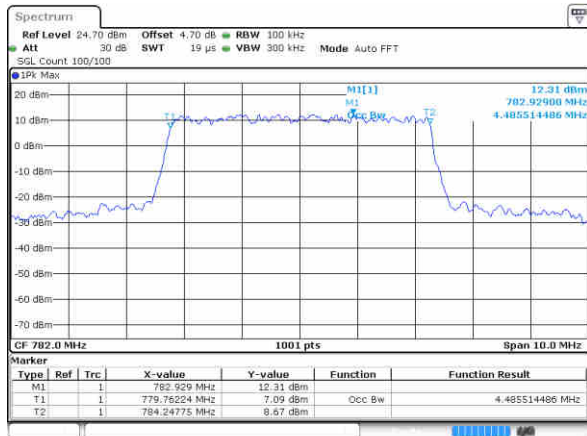


LTE Band 13

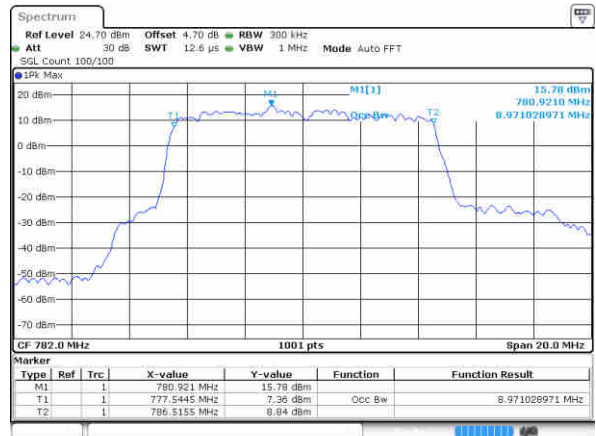
Lowest Channel / 5MHz / 64QAM



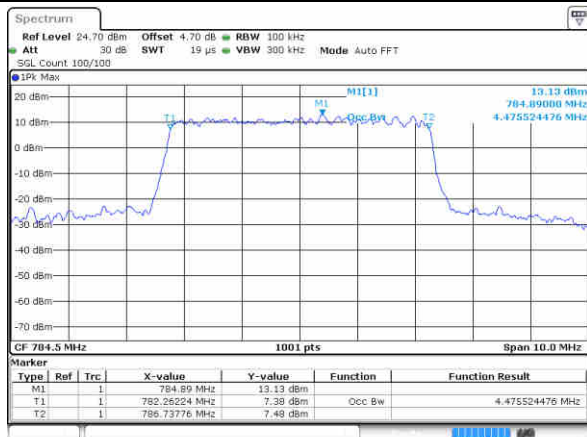
Middle Channel / 5MHz / 64QAM

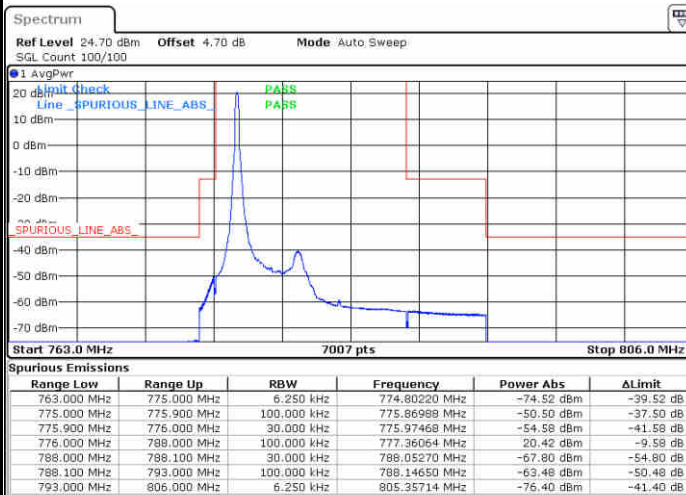
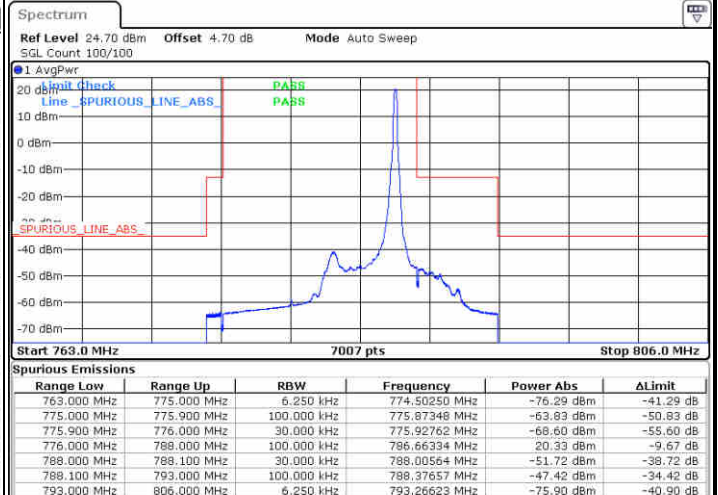
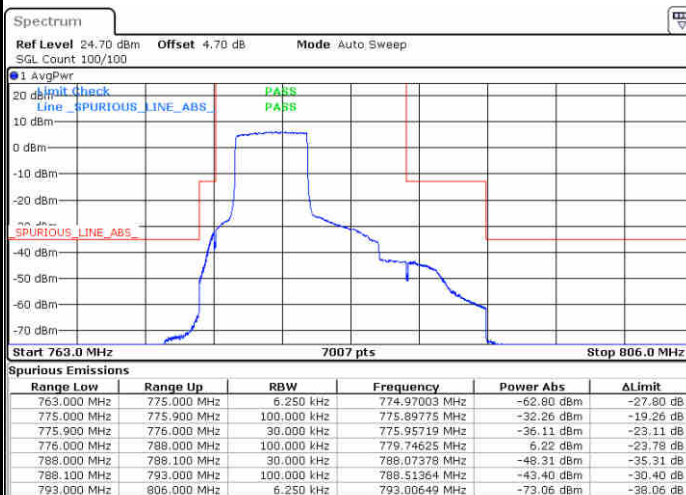
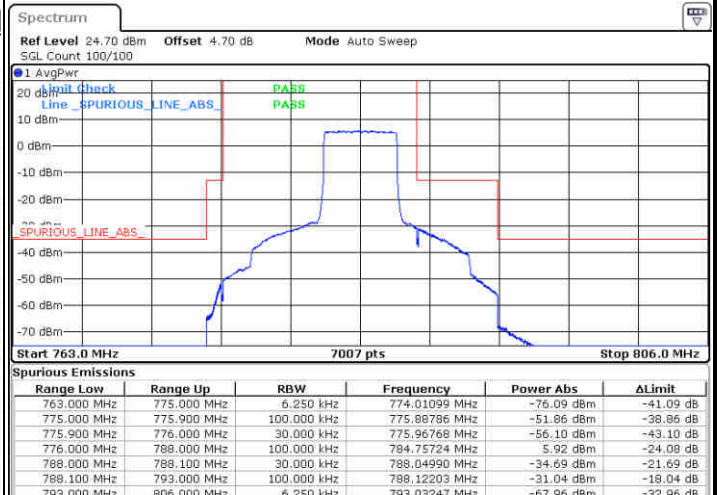


Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

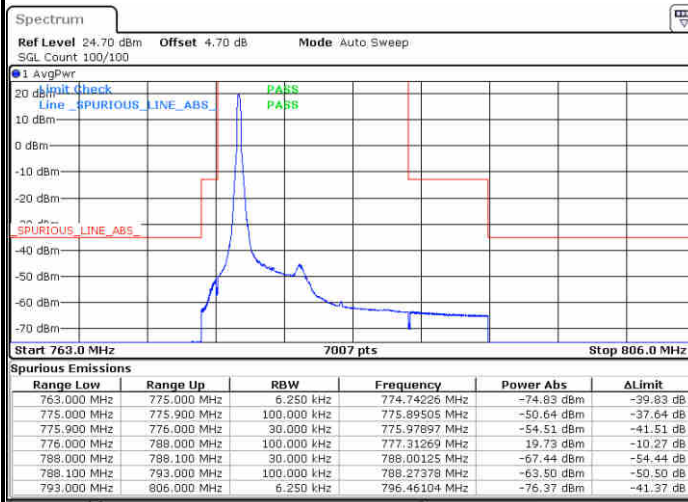


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



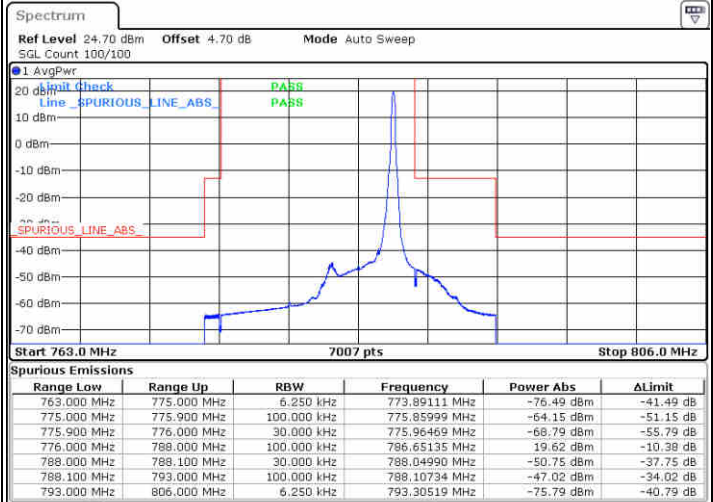
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



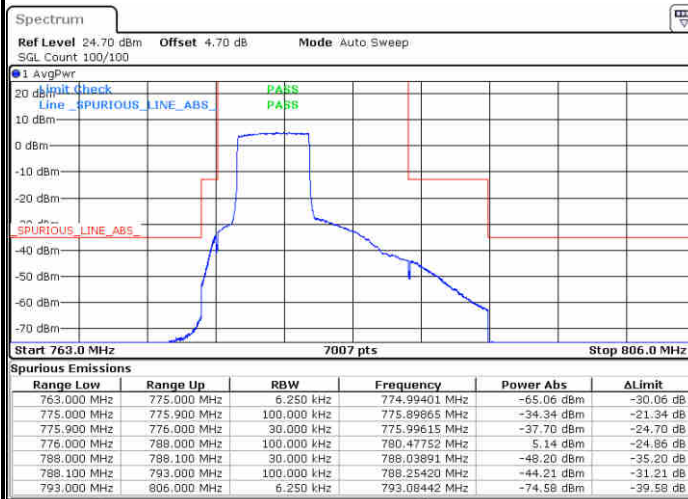
Date: 26 JUL 2020 04:30:03

Highest Band Edge / 1 RB



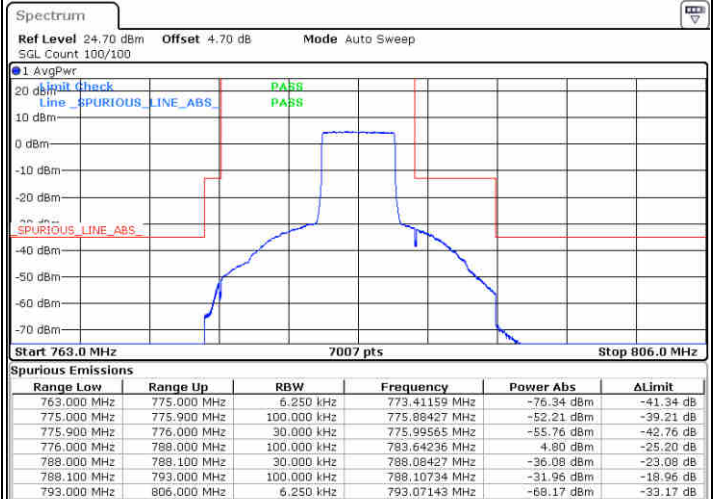
Date: 26 JUL 2020 04:52:04

Lowest Band Edge / Full RB



Date: 26 JUL 2020 04:23:03

Highest Band Edge / Full RB

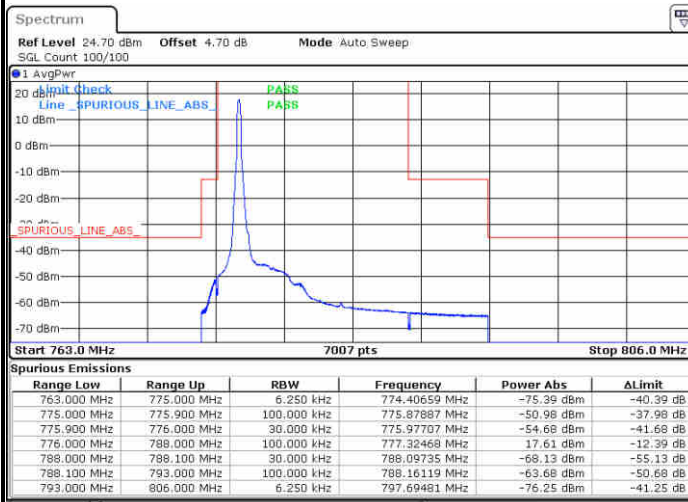


Date: 26 JUL 2020 04:44:22



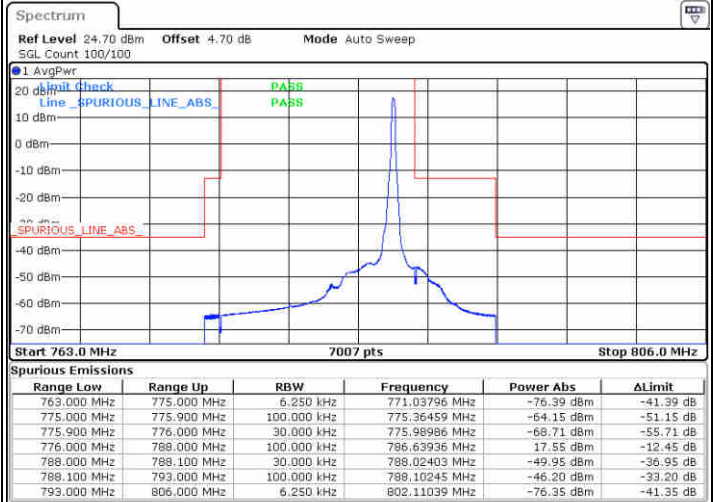
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



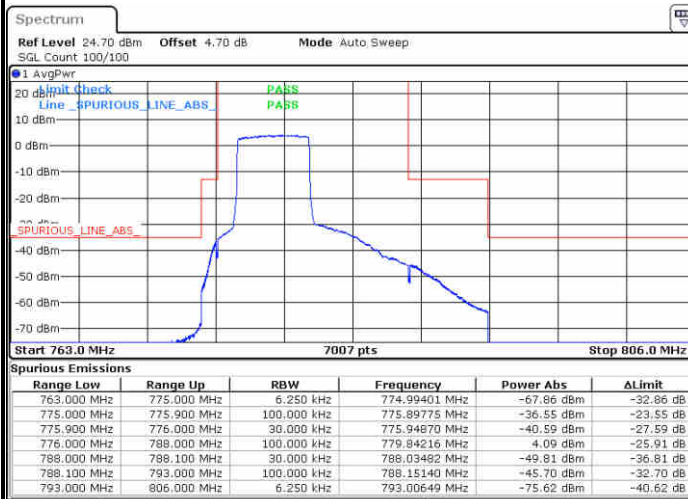
Date: 26 JUL 2020 04:27:50

Highest Band Edge / 1 RB



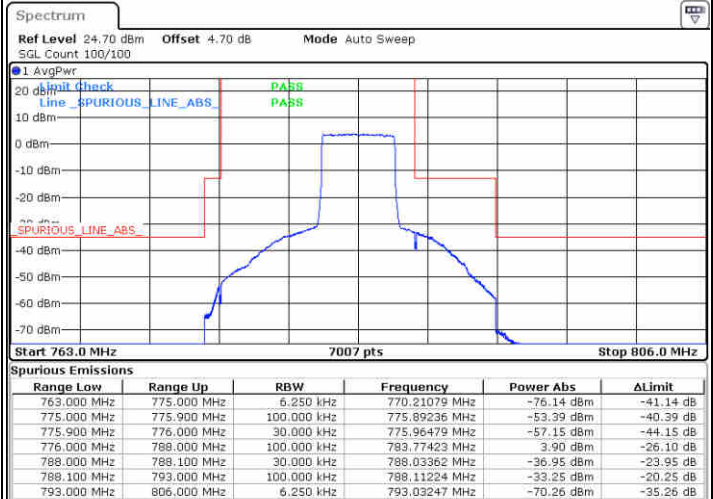
Date: 26 JUL 2020 04:53:21

Lowest Band Edge / Full RB



Date: 26 JUL 2020 04:26:14

Highest Band Edge / Full RB

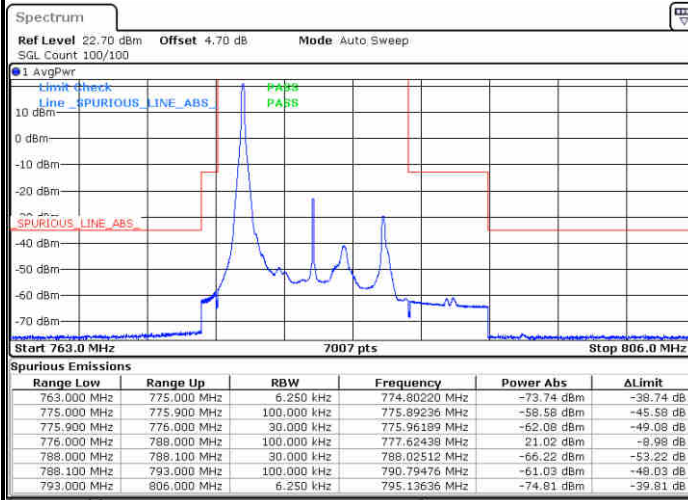


Date: 26 JUL 2020 04:45:57



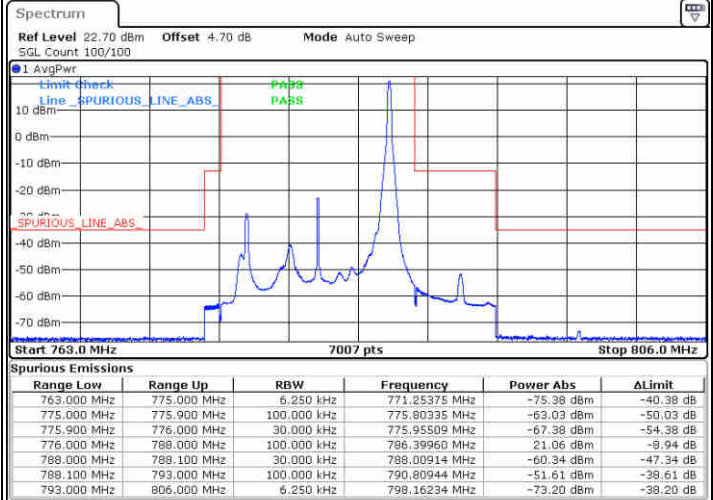
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



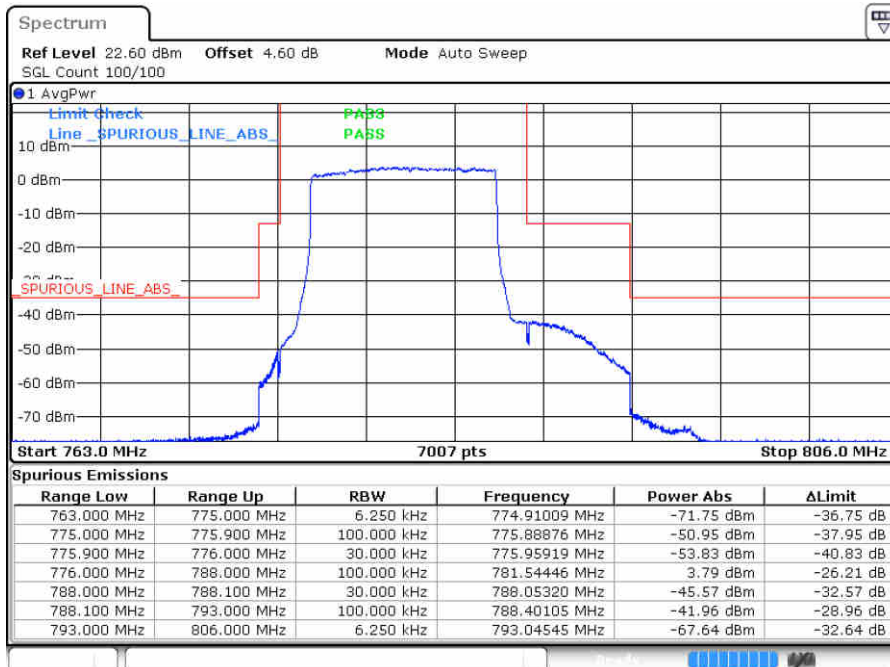
Date: 21.AUG.2020 21:09:22

Highest Band Edge / 1 RB



Date: 21.AUG.2020 21:11:43

Band Edge / Full RB

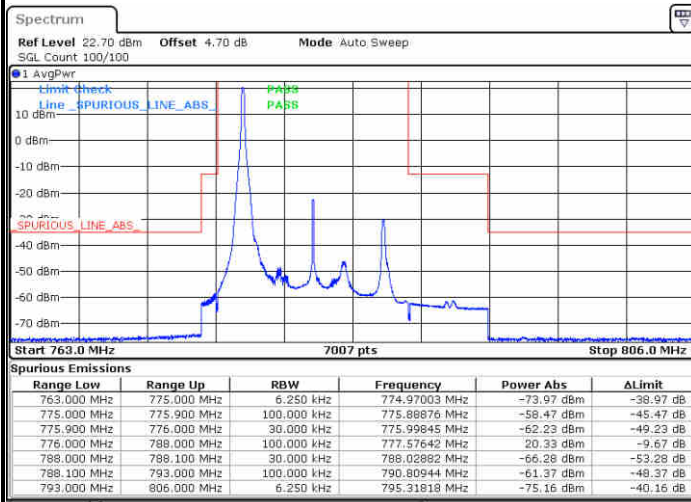


Date: 26.JUN.2020 04:39:04



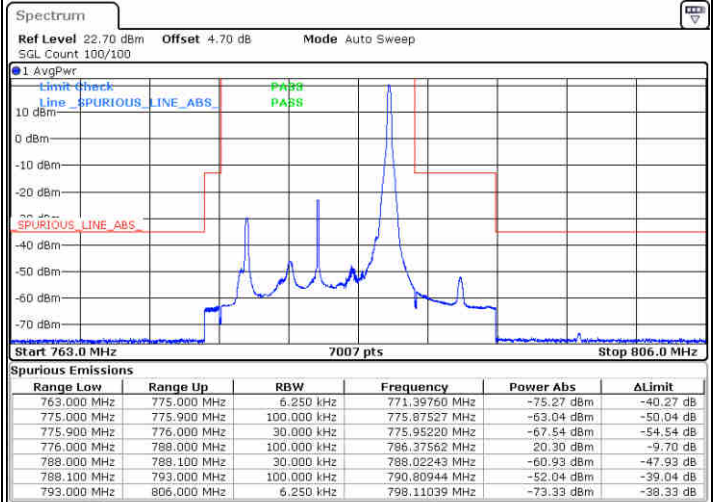
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



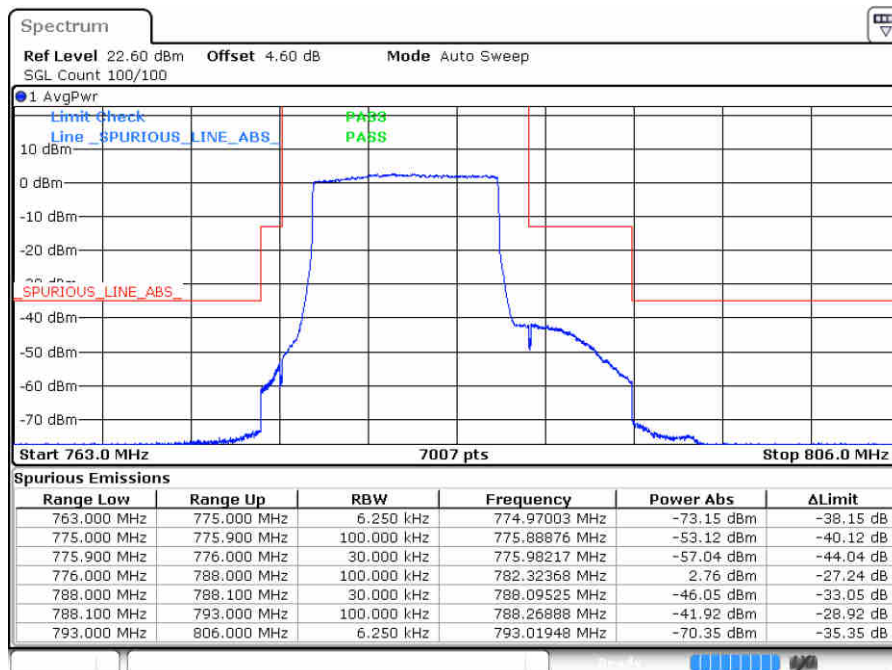
Date: 21.AUG.2020 21:07:43

Highest Band Edge / 1 RB



Date: 21.AUG.2020 21:13:04

Band Edge / Full RB

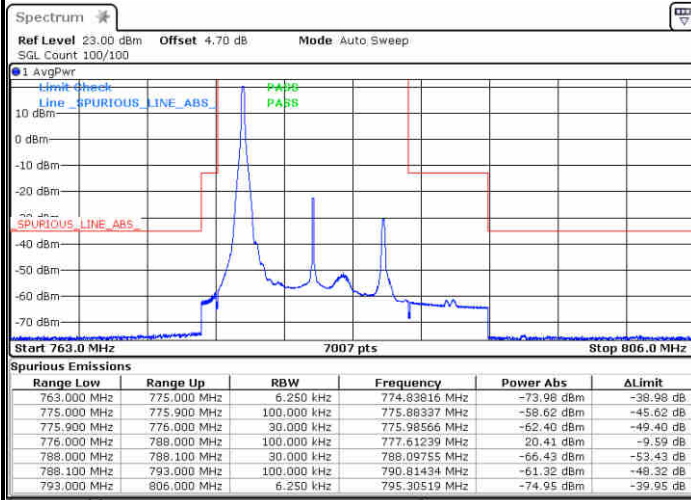


Date: 26.JUN.2020 04:40:42



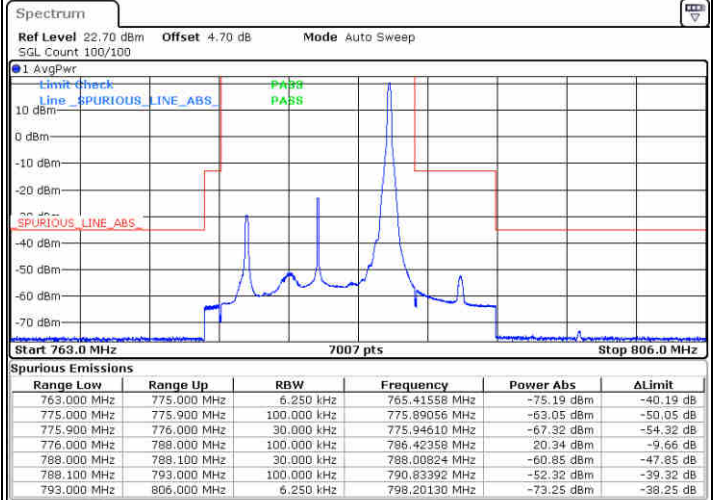
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



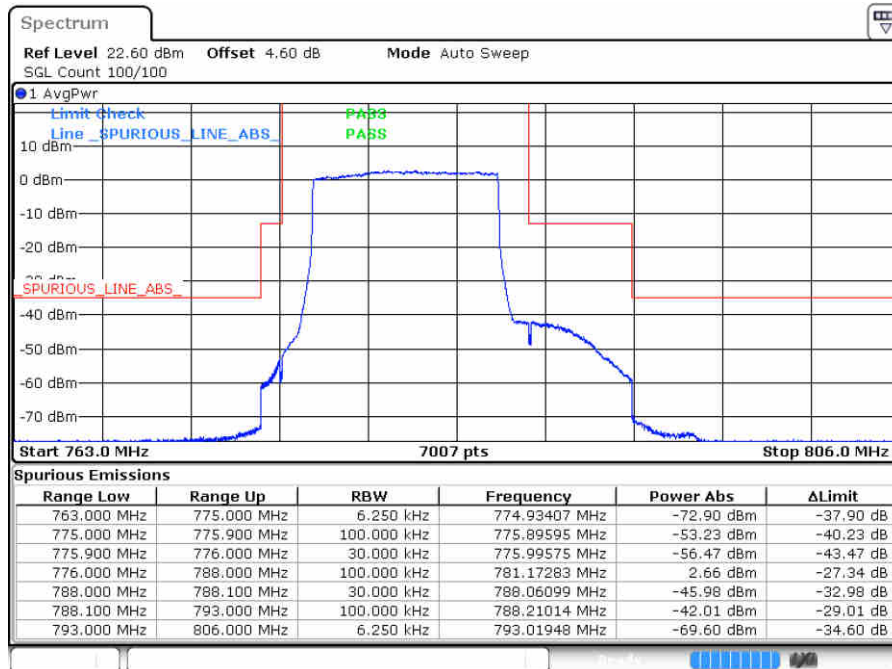
Date: 21.AUG.2020 21:06:22

Highest Band Edge / 1 RB



Date: 21.AUG.2020 21:14:34

Band Edge / Full RB



Date: 26.JUN.2020 04:59:59